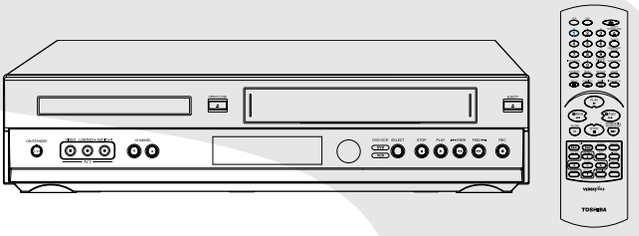
TOSHIBA

FILE NO. 810-200311X

SERVICE MANUAL

DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

SD-33VB
SD-33VE
SD-33VL



MARCH, 2003

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SECTION 1

SUMMARY

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TOSHIBA

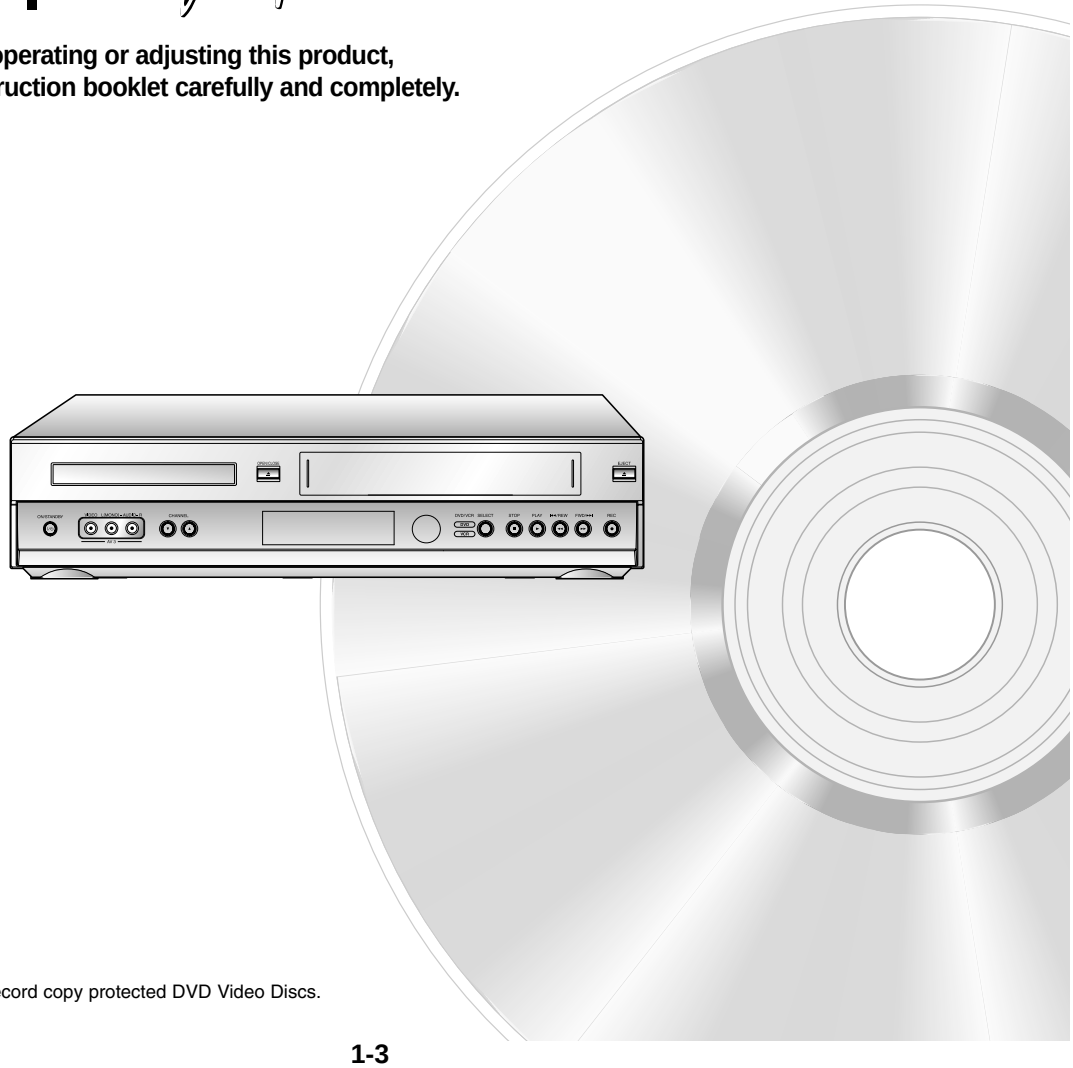
DVD PLAYER &
VIDEO CASSETTE RECORDER

SD-33VB-S-TB

OWNER'S MANUAL

VHS Hi-Fi VIDEO Plus+®

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.



©2003 Toshiba Corporation
This device does not tape-record copy protected DVD Video Discs.

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

CAUTION:

This Digital Video Disc Player employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference, should the unit require maintenance, contact an authorized service location-see service procedure.

Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus shall not be exposed to water, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

CE This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 89/336/EEC, 93/68/EEC and 73/23/EEC.

Notes on copyrights:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyright material without permission.

This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

Features:

- Complete versatility to play DVD, VCDs, audio CDs or VHS Tapes.
- Watch a DVD while recording a TV show to the VCR.
- Remote controls DVD and VCR decks.
- Records from DVD to VHS (unless DVD is copy protected with Macrovision).
- Hi-Fi Stereo VCR.

POWER: This unit operates on a mains supply of 200-240V, 50Hz.

WIRING: This unit is supplied with a BSI 1363 approved 13 amp mains plug, fused at 5 amp. When replacing the fuse always use a 5 amp BS 1362, BSI or ASTA approved type. Never use this plug with the fuse cover omitted. To obtain a replacement fuse cover contact your dealer. If the type of plug supplied is not suitable for the mains sockets in your home, then the plug should be removed and a suitable type fitted. Please refer to the wiring instructions below:

WARNING: A mains plug removed from the mains lead of this DVD player must be destroyed. A mains plug with bared wires is hazardous if inserted in a mains socket.
Do not connect either wire to the earth pin, marked with the letter E or with the earth symbol ⏚ or coloured green or green and yellow.
If any other plug is fitted, use a 5 amp fuse, either in the plug, or at the distribution board.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following codes:
- BLUE: NEUTRAL, BROWN: LIVE - As the colours of the wires in the mains lead of this DVD player may not correspond with the coloured marking identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured. So, please read the points below for your own safety. They are of a general nature, intended to help you with all your electronic consumer products and some points may not apply to the goods you have just purchased.

****

DO read the operating instructions before you attempt to use the equipment.
DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between the pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug before making or changing connections.
DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.
DO be careful with glass panels or doors on equipment

****

DON'T remove any fixed cover as this may expose dangerous voltages.
DON'T obstruct the ventilation openings of the equipment with items such as newspapers, tablecloths, curtains, etc. Overheating will cause damage and shorten the life of the equipment.
DON'T allow electrical equipment to be exposed to dripping or splashing, or objects filled with liquids, such as vases, to be placed on the equipment.
DON'T place hot objects or naked flame sources such as lighted candles or nightlights on, or close to equipment. High temperatures can melt plastic and lead to fires.
DON'T use makeshift stands and NEVER fix legs with wood screws - to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.
DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.
DON'T listen to headphones at high volume, as such use can permanently damage your hearing.
DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a stand-by mode. Switch off using the switch on the equipment and make sure that your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.
DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way -switch off, withdraw the mains plug and consult your dealer.

ABOVE ALL

---NEVER let anyone especially children push anything into holes, slots or any other opening in the case - this could result in a fatal electrical shock;

---NEVER guess or take chances with electrical equipment of any kind
---it is better to be safe than sorry!

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About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Indicates special operating features of this unit.

Indicates tips and hints for making the task easier.

Playable Discs

DVD VIDEO	DVD (8 cm / 12 cm disc)
COMPACT disc DIGITAL VIDEO	Video CD (VCD) (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm / 12 cm disc)

In addition, this unit can play a DVD-R and CD-R or CD-RW that contains audio titles, MP3, WMA or JPEG files.

Notes

– Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
– Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
– Do not use irregular shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally fixed by software manufacturers. As this unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available, or other functions may be added.
Refer also to the instructions applied with the DVDs and Video CDs. Some DVDs made for business purposes may not be played on the unit.

Regional code of the DVD player and DVDs

This DVD player is designed and manufactured for playback of region “2” encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled “2” or “ALL”. If you try to play any other discs, the message “Check Regional Code” will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Disc-related terms

Title (DVD only)
The main film content or accompanying feature content or additional feature content, or music album. Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)
Sections of a picture or a musical piece that are smaller than titles.
A title is composed of one or several chapters. Each chapter is assigned a chapter number, enable you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Track (Video CD and audio CD only)
Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene
On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called “Scenes”. Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.
A scene is composed of one or several tracks.

Types of video CDs

There are two types of video CDs:

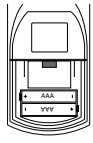
Video CDs equipped with PBC (Version 2.0)
PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)
Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.
- **Distance:** About 23 ft (7 m) from the front of the remote sensor
- **Angle:** About 30° in each direction of the front of the remote sensor

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two (size AAA) batteries with ⊕ and ⊖ aligned correctly.

Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

When setting the unit
The picture and sound of a nearby TV or radio may be distorted during playback. In this case, position the unit away from the TV or radio, or turn off the unit after removing the disc.

To keep the surface clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber of plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn down, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

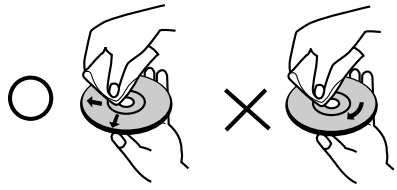
Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⃠ symbol display

" ⃠ " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not permitted by the DVD+VCR or is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbol is applicable only to the disc represented by the symbol.

- **DVD** DVD
- **VCD2.0** Video CDs with the PBC (playback control) function.
- **VCD1.1** Video CDs without the PBC (playback control) function.
- **CD** Audio CDs.
- **MP3** MP3 disc.
- **WMA** WMA disc.
- **JPEG** JPEG disc.

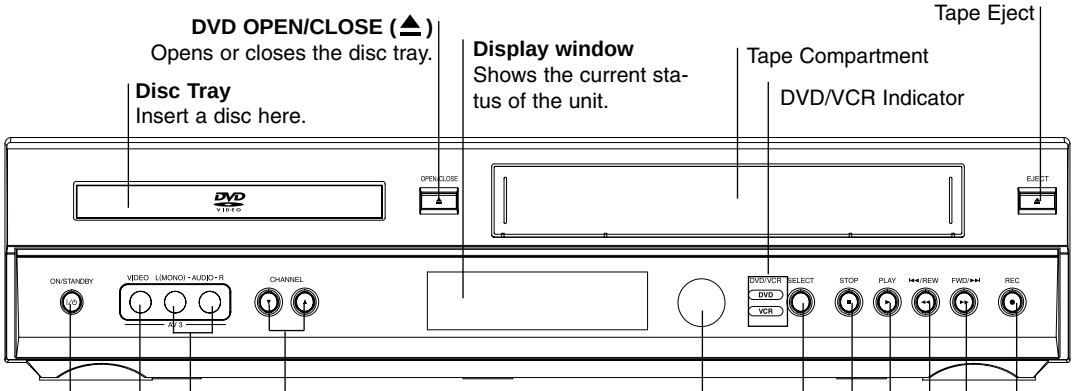
Selecting the Viewing Source

You must select one of your output sources (DVD or VCR) to view on the TV screen.

- **If you want to view DVD deck output source:**
Press DVD on the remote or DVD/VCR on the front panel until DVD indicator in the display window lights and output source of DVD deck is viewed on the TV screen.
- **If you want to view VCR deck output source:**
Press VCR on the remote or DVD/VCR on the front panel until VCR indicator in the display window lights and output source of VCR deck is viewed on the TV screen.

Notes
- If you insert a disc while the DVD+VCR is in the VCR mode, the DVD+VCR will switch to DVD mode automatically.
- If you insert a cassette tape without prevention tab while the DVD+VCR is in the DVD mode, the DVD+VCR will switch to VCR mode automatically.

Front Panel and Display Window



Remote Sensor
Point the remote control here.

VCR Record

Channel Programme Selectors

DVD/VCR Selector

Fast-Forward
Go to NEXT chapter/track.
Press and hold for two seconds for a fast forward search.
Winds the tape forwards.

STOP (■) Stops playback.

Audio IN (L/R) Jacks

PLAY (▶) Starts playback.

Video IN Jack

Reverse Skip/Scan, Rewind
Go to beginning of current chapter/track or to PREVIOUS chapter/track.
Press and hold for two seconds for a fast reverse search
Rewinds the tape.

POWER(ON/STANDBY)
Switches the unit to ON or OFF.

ANGLE active.

MP3 MP3 disc inserted.

PROG. Programmed playback active.

TITLE Indicates current title number.

CHP/TRK Indicates current chapter or track number.

VCR DVD+VCR functions are available and channels are selected at DVD+VCR.

A ↔ B
Indicates A-B repeat mode.

ALL
Indicates repeat all mode.

TIMER DVD+VCR is in timer recording or a timer recording is programmed.

REC DVD+VCR is Recording.

CDREC DVD to VCR copy is in progress.

HI-FI Indicates the unit is playing back a tape recorded in Hi-Fi.

DVD
DVD inserted.
VCD
Video CD inserted
CD
Audio CD inserted.

PR DVD+VCR is tuned to Channel XX.

BIL Indicates when a BILINGUAL broadcast is being received.

ST Indicates a stereo broadcast is being received.

Indicates total playing time, elapsed time, or current deck status (Playback, Pause, etc).

SP LP
Displays the recording and playback speed.

A cassette is in the VCR deck.

Remote Control

DVD/VCR select button
Select the output source (DVD or VCR) to view on the TV screen.

0-9 numerical buttons
Selects numbered options in a menu.

INPUT SELECT
To select the VCR deck's source (Tuner, LINE 1, or LINE 2).

ANGLE ●
Selects a DVD camera angle if available.

SUBTITLE ●
Selects a subtitle language.

AUDIO ●
Selects an audio language (DVD) or an audio channel (CD).

INSTANT REPLAY ●
Replays through 10 seconds of playback.

PLAY ●
Starts playback.

REW ●
Rewinds the tape during the STOP mode or for fast reverse picture search.

FWD ●
Advances the tape during the STOP mode or for fast forward picture search.

SLOW ●
Forward slow playback of tape.

STOP ●
Stops playback.

PAUSE/STILL, PAUSE/STEP ●
Pause playback or recording
Press repeatedly for frame-by-frame playback during pause.

SKIP ⏮ ●
Skip to beginning of current chapter or track, press twice in quick successions to go to previous chapter or track.
Press and hold button for about two seconds to search backward. (For DVD only)

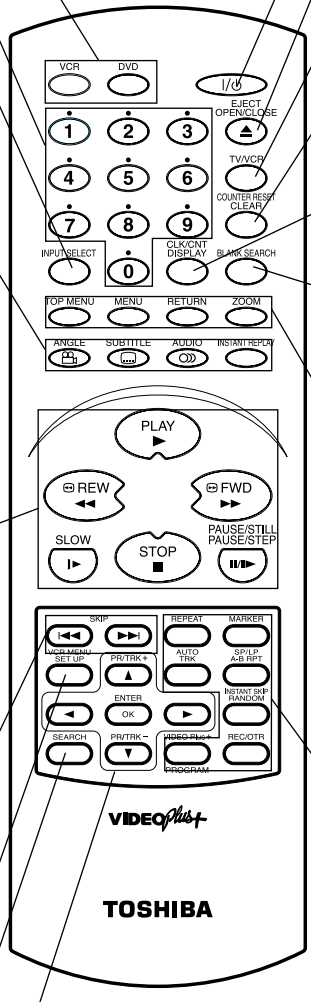
SKIP ⏭ ●
Skip to next chapter or track.
Press and hold button for about two seconds to search forward.(For DVD only)

SETUP, VCR MENU
Accesses or removes DVD setup menu and VCR menu.

SEARCH
Displays MARKER SEARCH menu.

◀/▶/▲/▼ (left/right/up/down) ●
- Selects an option in the menu
- **PR/TRK** (+/-): Selects channel of VCR. Adjusts manually the tape's picture onscreen.

ENTER/OK ●
- Acknowledges menu selection.
- Displays functions on the TV screen.



POWER
Switches DVD+VCR ON and OFF.

EJECT, OPEN/CLOSE
- Opens and closes the disc tray.
- Ejects the tape in the VCR deck.

TV/VCR
To view channels selected by the VCR tuner or by the TV tuner.

COUNTER RESET, CLEAR
- Resets tape counter to M 0:00:00
- Removes a track number on the program menu or a mark on the MARKER SEARCH menu.

CLK/CNT, DISPLAY
Accesses On-Screen display.
Switches among the clock, tape counter and tape remaining modes on the display.

BLANK SEARCH
Finds end points of recording.

● TOP MENU
Displays the disc's Title menu, if available.

● MENU
Accesses menu on a DVD disc.

● RETURN
- Removes the setup menu.

● ZOOM
Enlarges video image.

● REPEAT
Repeat chapter, track, title, all.

● A-B REPEAT, SP/SLP
- Repeats sequence.
- Selects recording speed of the tape.

● MARKER
Marks any point during playback.

● RANDOM, INSTANT SKIP
- Plays tracks in random order.
- Fast forwards picture search through 30 seconds of recording.

● REC/OTR
Records normally or activates One-touch Timer Recording with repeated presses.

● AUTO TRK
Adjusts automatically the tape's picture onscreen.

● VIDEO PLUS+/PROGRAM
- To display the programme menu for VIDEO PLUS+ programming.
- Accesses or removes Program menu.

Note
This remote control use the same buttons for VCR and DVD functions (ex. PLAY).
When using a VCR, first press the VCR button.
When using a DVD, first press the DVD button.

Rear Panel

AERIAL
Connect the aerial using this jack.

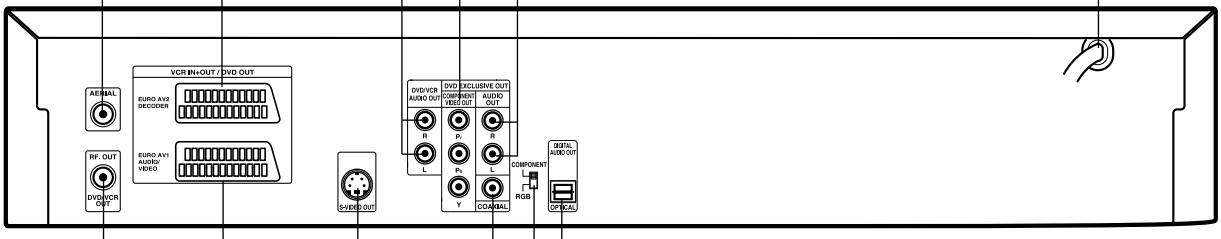
EURO AV2 DECODER
Connect to pay-TV decoder, Set Top Box or another video recorder.

DVD/VCR AUDIO OUT (Left/Right)
Connect to an amplifier, receiver or stereo system.

COMPONENT VIDEO OUT (Y Pb Pr) (DVD EXCLUSIVE OUT)
Connect to a TV With Y Pb Pr inputs.

AUDIO OUT (Left/Right) (DVD EXCLUSIVE OUT)
Connect to an amplifier, receiver or stereo system.

AC Power Cord
Connect to a power source.



OPTICAL (Digital audio out jack)
Connect to digital (optical) audio equipment.

VIDEO OUTPUT Switch
Select either **COMPONENT** or **RGB** depending on how you connect this unit to the TV.

COAXIAL
(Digital audio out jack)
Connect to digital (coaxial) audio equipment.

S-VIDEO OUT
Connect to a TV With S-Video input.

EURO AV1 AUDIO/VIDEO (VCR IN+OUT/DVD OUT)
Connect to your TV set or another video recorder.

RF OUT (DVD/VCR OUT)
Connect to your TV using this jack.

⚠

Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the unit.
- Please refer to the manuals of your TV, Stereo System or other devices as necessary to make the best connections.
- For better sound reproduction, connect this unit's AUDIO OUT jacks to the audio in jacks of your amplifier, receiver, stereo or audio/video equipment. See "Connecting to optional equipment" on page 11.

Caution

- Make sure this unit is connected directly to the TV. Set the TV to the correct video input channel.
- Do not connect this unit's AUDIO OUT jack to the phono in jack (record deck) of your audio system.

Connecting to a TV

- Make one of the following connections, depending on the capabilities of your existing equipment.
- When using the SCART's RGB signal, set the video output switch to **RGB**. When using the **COMPONENT VIDEO OUT** jacks, set the video output switch to **COMPONENT**.

Basic connection (AV)

1 Connect the **EURO AV1 AUDIO/VIDEO** on the rear panel of this unit to the SCART input socket on the TV using a SCART lead.

Basic connection (RF)

1 Connect the RF antenna cable from your indoor/ outdoor antenna to **AERIAL** jack on the rear panel of this unit.

2 Connect the supplied RF antenna cable from the **RF OUT (DVD/VCR OUT)** jack on the rear panel of this unit to your television's Antenna Input.

S-Video connection

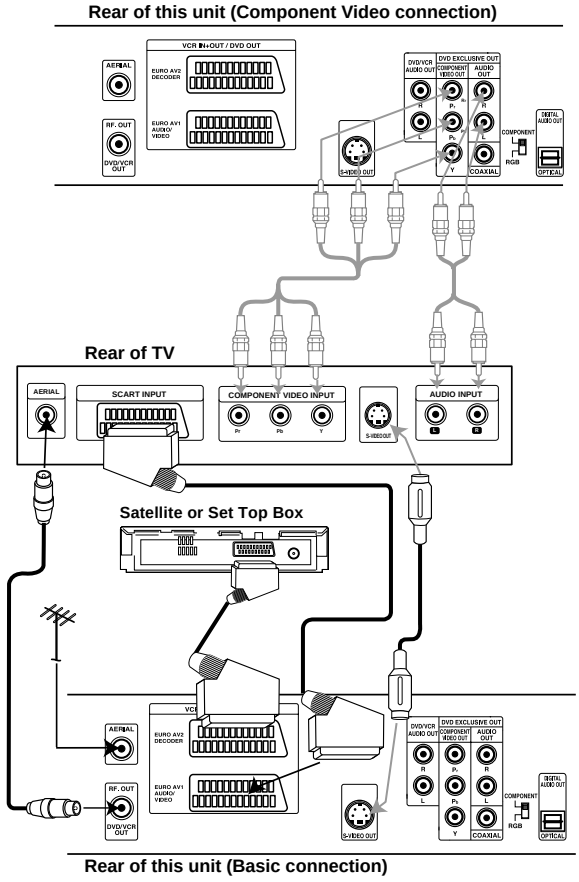
1 Connect the **S-VIDEO OUT** jack on this unit to the S-Video in jack on the TV using the optional S-Video cable.

2 Connect the Left and Right **DVD/VCR AUDIO OUT** jacks of this unit to the audio left/right in jacks on the TV using the audio cables.

Component Video (Color Stream®) connection (DVD EXCLUSIVE OUT)

1 Connect the **COMPONENT VIDEO OUT**/ **(DVD EXCLUSIVE OUT)** jacks on the DVD+VCR Player to the corresponding in jacks on the TV using an Y Pb Pr cable.

2 Connect the Left and Right AUDIO OUT **(DVD EXCLUSIVE OUT)** jacks of the DVD+VCR Player to the audio left/right in jacks on the TV using the audio cables.



Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Surround.

Connect the Left and Right **DVD/VCR AUDIO OUT** or **AUDIO OUT (DVD EXCLUSIVE OUT)** jacks on this unit to the audio left and right in jacks on your amplifier, receiver or stereo system, using the audio cables.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/ Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2 or DTS)

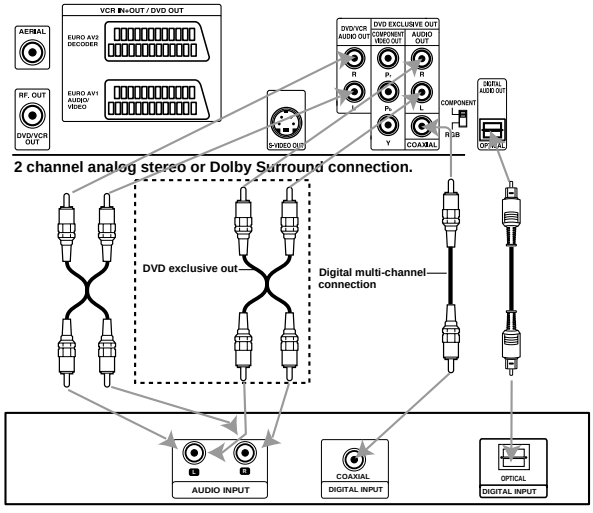
1. Connect one of this unit's DIGITAL AUDIO OUT jack (**COAXIAL** or **OPTICAL**) to the corresponding in jack on your amplifier. Use an optional digital (optical or coaxial) audio cable.
2. You will need to activate this unit's digital output. (See "Digital Audio Output" on page 19).

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your unit (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

Warning:
Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Rear of this unit



Amplifier (Receiver)

Notes

- If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
- Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
- To see the audio format of the current DVD in the On-Screen Display, press **AUDIO**.

Tuning in a video channel on your TV

Notes

- The output frequency of this video recorder (VCR) is set at UHF channel 36. If channel 36 is already used by another TV station, or if the picture is distorted, you can change the transmitter channel of your VCR. Stages 5 ~ 8 will show you how to change the output frequency of your VCR.
- Your TV receives signals from the video recorder (VCR) like another TV station. You have to select a channel number on your TV and tune it in so that you may watch video tapes. If you have used a **SCART** or **AUDIO** and **VIDEO** cables then your TV should already have a dedicated video channel built into it, usually called **AV**.

1 Make sure that you have correctly installed your VCR as described earlier in this book.
Press I/⏻ to turn on your DVD+VCR.
Turn on your TV.

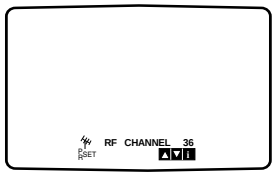
2 Insert a pre-recorded video tape into your VCR and press **PLAY** ▶ on the remote control.
Select a TV channel number on which you wish to watch video's.
Don't worry if you don't have a video-tape to play at this stage! If you switch your VCR on and continue stages **3 ~ 4**, instead of seeing video playback tune your TV until you see a bright blue screen.

3 Tune this channel until the video picture is sharp and the sound is clear.
If you have used a **SCART** or **AUDIO** and **VIDEO** cables you will not have to tune your TV, simply select the AV channel. The **AV** channel is already pre-tuned for optimum video playback on your TV.

4 Store this channel on your TV.
You will need to look at the TV instruction book if you do not know how to do this.

5 **Only carry out stages 5 ~ 8 if you cannot obtain clear video playback as described in stages 1 ~ 4.**
Select a TV channel number on which you wish to watch video's.
Make sure that your VCR is in standby pressing I/⏻ on the remote control (only the clock will be displayed).

6 Press **CHANNEL** ▲ or ▼ on the front of your VCR+DVD for more than 4 seconds.
RF36 will appear in the display window.
The following picture will be displayed on the TV screen.



7 Use **CHANNEL** (▲/▼) on the front of you DVD+VCR or **PR/TRK(+/-)** on the remote control to select another video channel. You may select any channel number between 22 and 68.
You can also set it to "OFF" if there is any interference when your TV is connected to the VCR with a SCART lead.

8 Select a TV channel number on which you wish to watch video's.
Press **ON/STANDBY** I/⏻ on the front of your DVD+VCR when you have finished.
Tune this channel so that a bright blue screen appears.
Store this channel on your TV.

Notes

Make sure that you have correctly installed your DVD+VCR and successfully tuned in a dedicated video channel on your TV. If you do not tune in a dedicated video channel on your TV you will be unable to view and record video tapes!

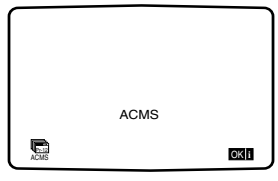
Initial preset

For the following steps we do assume that you have just connected your video recorder for the very first time. In this case the video recorder is on after mains connection. You should not touch any buttons yet. On the connected TV you will now see.

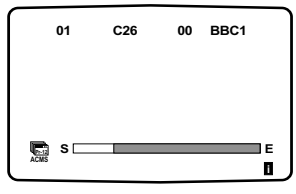
Note

If this menu does not appear, your video recorder was programmed already.

1 If you have a satellite receiver make sure that it is connected to your vcr, switched on and Sky News has been selected.



2 Press **ENTER/OK** to start the automatic storing of the channels of the TV stations in your area.

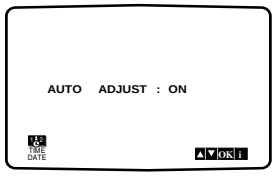


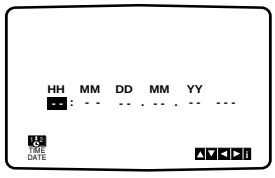
3 The **TV STATION TABLE** will appear when tuning is completed.
Press **VCR MENU** to save your settings.

Setting the clock Manually

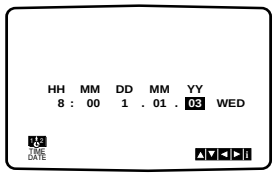
The clock in your DVD+VCR controls time and date settings for your DVD+VCR.
The clock is set automatically during **ACMS** (Automatic Channel Memory System) when your DVD+VCR detects a channel that broadcasts a Teletext signal. If the broadcast signal is weak the clock will not be set and will require setting manually.

1 Press **VCR MENU**.
Press ◀ or ▶ to select **TIME DATE**.
Press **ENTER/OK**.
The auto adjust mode can be set to “OFF” by pressing ▲ or ▼ if you want to set the time manually.
Press **ENTER/OK**.





2 Use the **numbered buttons** on the remote control to alter the **HOURS, MINUTES, DAY, MONTH** and **YEAR**.
Please note your DVD+VCR uses a 24 hour clock. e.g. 1pm will be displayed as 13:00.
The day of the week will appear automatically when you enter the year.



3 If you make a mistake press ◀ or ▶ and enter the correct details.

4 Press **VCR MENU**.

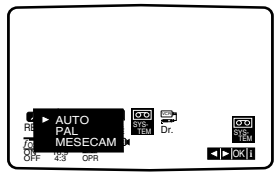
To set the colour system

1 Press **VCR MENU**.

2 The main menu will appear on the TV screen.

3 Press ◀ or ▶ to select the **SYSTEM** and press **ENTER/OK**.

4 Press ▲ or ▼ to select according to the **COLOUR** system used.



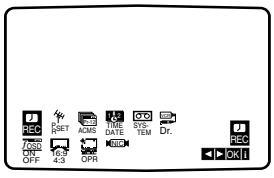
5 Press **VCR MENU** to remove the menus from the TV screen.

How to use the main menu

This DVD+VCR can easily be programmed by using the menus displayed on screen.
The menus are controlled from the Remote Control Handset.

1 Switch on your TV set and video recorder by pressing the I/⏻ button.

2 Press **VCR MENU** button.
The main menu will appear on the TV screen.



- **REC -** Timer recording setting (see p. 24).
- **PR SET -** Manual tuning setting (see p. 15).
- **ACMS -** ACMS (Automatic Channel Memory System) (see p. 14).
- **TIME DATE -** Date & clock setting (see p. 13).
- **SYSTEM -** To set the Colour TV System (see p. 13).
- **Dr. -** To check a problem with your VCR (see p. 33).
- **F.OSD ON/OFF -** To display the operational mode of your VCR (see p. 32).
- **16:9/4:3 -** To select the aspect ratio of your TV (see p.33).
- **OPR -** To improve the playback picture (see p. 21).
- **NIC -** To activate or deactivate the NICAM digital sound (see p. 32).

3 Press ◄ and ► to select the desired menu.
Press **ENTER/OK** and use ▲ or ▼ to select.

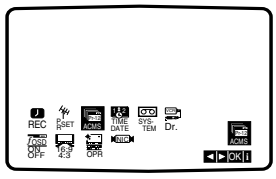
4 Press **VCR SETUP** to return to a TV picture.

Tuning in TV Stations Automatically

If the TV broadcast signal is weak your DVD+VCR may not detect the necessary information and will not be able to store them correctly. To overcome this problem please turn to the MANUAL TUNING section on page 15.

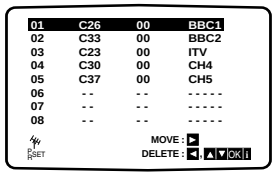
1 Press I/⏻ to turn on your DVD+VCR.

2 Press **VCR MENU** button.
The main menu will appear on the TV screen.
Press ◄ or ► to select the **ACMS**.
Press **ENTER/OK**.



3 Press **ENTER/OK** again to start the automatic tuning process.

4 The **TV STATION TABLE** will appear when tuning is completed.
Press **VCR MENU** to save your settings.

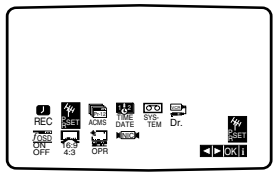


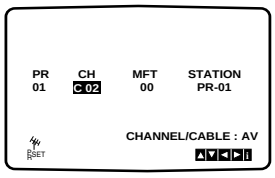
Note
Please note currently only a limited number of TV companies transmit the **Programme Delivery Control (PDC)** signal which enables your DVD+VCR to successfully identify and store them. If your DVD+VCR has difficulty in identifying a TV station please turn the page to find out how to manually tune in and name a TV station. While automatic tuning is taking place the time and date will set automatically.
If - - :- - appears in the DVD+VCR display it means that the broadcast signal is weak and the clock was not set. Please turn to **CLOCK SET** section of this book on page 13.
The DVD+VCR's clock will be set automatically when automatic tuning has finished. If the clock is wrong please see "Setting the clock manually" on page 13.

Tuning in TV Stations Manually

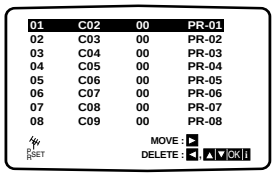
In certain areas of the country broadcast signals may be too weak for your VCR's automatic tuning process to find or assign TV stations correctly. You must tune in these weaker broadcast stations manually in order for your VCR to store them.

1 Press **VCR MENU**.
The main menu will appear on the TV screen.
Press ◄ or ► to select the **PR SET**.
Press **ENTER/OK**.



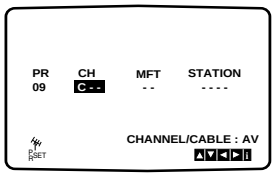


2 Press **VCR MENU**.
The station table will appear.
Press ▲ or ▼ to select the programme number that

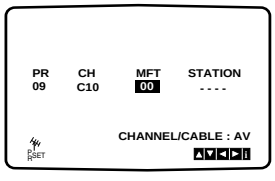


you want to tune (for example, PR 09).

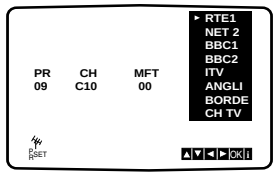
3 Press **ENTER/OK**.
Press **INPUT SELECT** to select **C** (Standard stations) or **S** (Cable stations):
C02 - C69, S01 - S41.



Enter the channel number of station that you want to tune with **the numbered buttons** or use ▲ or ▼ to find the required station.

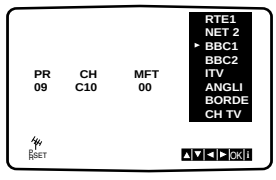


4 Searching will stop when it locates a stations.
Press ► to select **MFT.**
Control the fine tuning of the station by using ▲ or ▼.



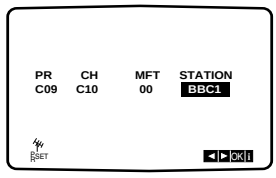
5 Press ► to select **STATION** so that you may name your TV station.

If your station name isn't on the list do not press ENTER/OK, but go to stage 7.

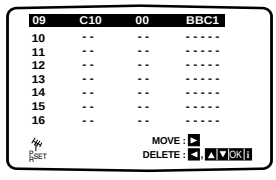


Press **ENTER/OK**.
The TV station name list will appear.

6 Use ▲ or ▼ to select a station name from the list.
Press **ENTER/OK** to select it.



7 You can change a TV station name manually rather than using the "standard" names.
Press ►.
Use ▲ or ▼ to select **letters** and **numbers** for the



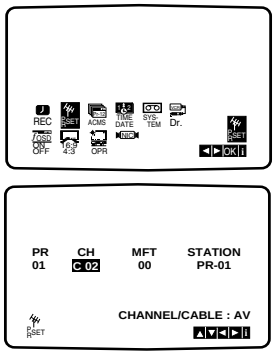
new station name.
Use ◄ or ► to move back and forth between characters.
Press **ENTER/OK**.

8 Press **VCR MENU**, confirm the station placement.
Press **VCR MENU** again.
Your new TV station has now been tuned into your VCR.
If you wish to manually tune other stations repeat stages **1 - 8**.

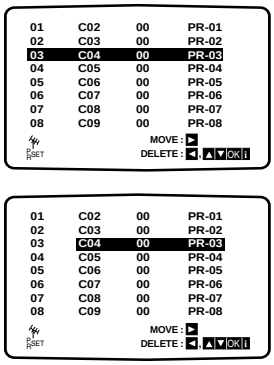
Changing the order of TV Stations

After tuning TV stations into your VCR you may wish to change the order in which they are stored without having to retune them again. The instructions given on this page will show you how you can simply move them into your desired order.

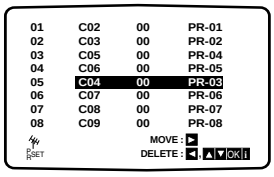
1 Press **VCR MENU**.
The main menu will appear on the TV screen.
Press ◄ or ► to select the **PR SET**.
Press **ENTER/OK**.



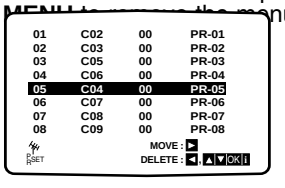
2 Press **VCR MENU**.
Use ▲ or ▼ to select the **programme number** you want to move (for example, PR 03).



Press ►.



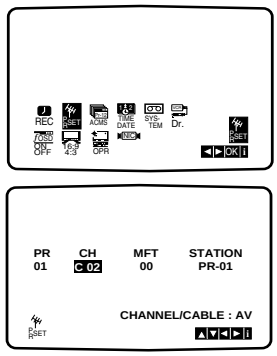
3 Use ▲ or ▼ to select the **programme number** you want to move to (for example, PR 05).
4 Press **ENTER/OK**.
The selected **programme** will be moved to **the new programme number**.
If you wish to move other TV stations repeat stages 1 - 4.
Press **VCR MENU** to remove the menus from the TV screen.



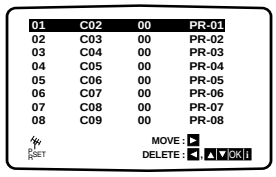
Deleting TV Stations

After tuning TV stations into your VCR you may wish to delete a station.
The instructions given on this page will show you how you can easily delete any unwanted TV stations.

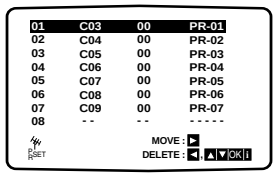
1 Press **VCR MENU**.
The main menu will appear on the TV screen.
Use ◄ or ► to select the **PR SET**.
Press **ENTER/OK**.



2 Press **VCR MENU**.
Use ▲ or ▼ to select the **programme number** you



want to delete. (for example, PR 01)
3 Press ◄.
After a short while, the selected station will be



deleted.
4 Press **VCR MENU** to remove the menus from the TV screen.
If you wish to delete other TV stations repeat stages **1 - 3**.

How to select Stored TV stations:

Stored TV stations can be selected in either of two ways.
Use **PR/TRK +** or **-** to select different stations that are tuned into your DVD+VCR.
You may also directly select stations using the **numbered buttons** on the remote control.

⚠ Caution:
Before using the remote control, press the DVD or TV button to select the device to be operated.

General Explanation

This manual gives the basic instructions for operating the DVD+VCR Player. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⃠ appears on the TV screen, indicating that the operation is not permitted by the DVD+VCR Player or is not available on the disc.

On-Screen Display

The general playback status can be displayed on the TV screen. Some options can be changed on the menu.

On-screen display operation

1 **Press DISPLAY during playback.**

2 **Use ▲/▼ to select an item.**
The selected option will be highlighted.

3 **Use ◄/► to change the setting of an item.**
The number buttons can also be used for setting numbers (e.g., title number). For some functions, press **ENTER/OK** to execute the setting.

Temporary Feedback Field Icons

TITLE	Repeat Title
CHAPT	Repeat Chapter
TRACK	Repeat Track (non-PBC Video CDs and Audio CD only)
ALL	Repeat Disc (non-PBC Video CDs and Audio CD only)
A B	Repeat A-B
OFF	Repeat Off
	Resume play from this point
⃠	Action prohibited or not available

Notes
- Some discs may not provide all of the features on the on-screen display example shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.

DVD

Options		Function (Use ▲/▼ to select desired option)	Selection Method
Title Number	1/3	**Shows the current title number and total number of titles, and** skips to the desired title number.	◄/►, or Numeric, ENTER/OK
Chapter Number	1/12	**Shows the current chapter number and total number of chapters, and** skips to the desired chapter number.	◄/►, or Numeric, ENTER/OK
Time search	0:16:57	**Shows the elapsed playing time, and** searches the point by the elapsed time directly.	Numeric, ENTER/OK
Audio language and Digital Audio Output mode	1 ENG DD 5.1 CH	**Shows the current audio soundtrack language, encoding method, and channel number, and** changes the setting.	◄/►, or AUDIO
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◄/►, SUBTITLE
Angle	1/1	**Shows the current angle number and total number of angles, and** changes the angle number.	◄/►, ANGLE
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◄/►

VCD2.0 **VCD1.1**

Items		Function (Use ▲/▼ to select desired item)	Selection Method
Track Number	1/4	**Shows the current track number, total number of tracks and PBC On mode, and** skips to the desired track number.	◄ / ►, or Numbers, ENTER/OK
Time	0:16:57	**Shows the elapsed playing time (Display only)**	–
Audio Channel	STER.	**Shows the audio channel, and** changes the audio channel.	◄ / ►, or AUDIO
Sound	NORM.	**Shows the current sound mode, and** any changes to the setting.	◄ / ►

Initial Settings

You can set your own Personal Preferences on the player.

General Operation

1 **Press SETUP.**
The setup menu appears.

2 **Use ▲/▼ to select the desired item.**
The screen will show the current setting for the selected option, as well as alternate setting(s).

3 **While the desired option is selected, press ▶, then ▲/▼ to select the desired setting.**

4 **Press ENTER/OK to confirm your selection.**
Some items require additional steps.

5 **Press SETUP, RETURN, or PLAY ▶ to exit the setup menu.**

Language

Disc Language DVD

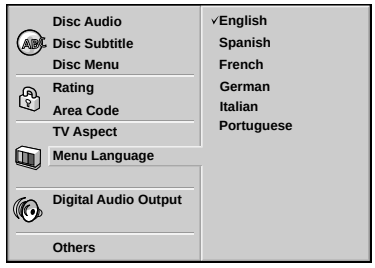
Select a language for the disc's Menu, Audio, and Subtitle.
Original : The original language set for the disc is selected.
Other : To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 36. If you enter the wrong language code, press CLEAR.

Notes

Disc Language selection may not work for some DVDs.

Menu Language

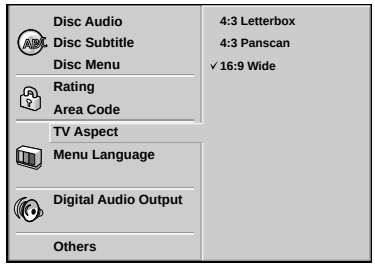
Select a language for the setup menu. This is the menu you see when you press SETUP.



Picture

TV Aspect DVD

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
4:3 Panscan: Select when a conventional TV set is connected. The video material formatted in the Pan & Scan style is played back in that style (Both sides of the picture are cut off.)
16:9 Wide: Select when a 16:9 wide TV is connected.



Sound

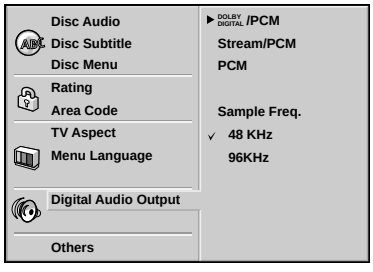
Digital Audio Output

Each DVD disc has a variety of audio output options. Set the DVD+VCR's Digital Audio Output according to the type of audio system you use.

DOLBY DIGITAL/PCM: Select DOLBY DIGITAL/PCM if you connected the DVD+VCR's DIGITAL AUDIO OUT jack to a Dolby Digital decoder (or an amplifier or other equipment with a Dolby Digital decoder).

Stream/PCM: Select Stream/PCM if you connected the DVD+VCR's DIGITAL AUDIO OUT jack to an amplifier or other equipment with a DTS decoder, Dolby Digital decoder or MPEG decoder.

PCM: Select when connected to a 2 channel digital stereo amplifier. The DVD+VCR output sounds in the PCM 2ch format when you play a DVD video disc recorded on the Dolby Digital, MPEG1, or MPEG2 recording system.



Sample Frequency

To change the Sample Frequency setting, first select the desired Digital Audio Output as indicated as above. If your receiver or amplifier is NOT capable of handling 96KHz signals, select 48KHz. When this choice is made, this unit will automatically convert any 96KHz signals to 48KHz so your system can decode them. If your receiver or amplifier is capable of handling 96KHz signals, select 96KHz. When this choice is made, this unit will pass each type of signal through without any further processing.

Others

The DRC, Vocal, PBC and Auto Play settings can be changed.

- Use ▲/▼ to select the desired item and press ENTER/OK. The setting of the selected item alternates between On and Off.

Dynamic Range Control (DRC)

With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

Vocal

Set Vocal to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc will mix into normal stereo sound.

PBC

Set Playback Control (PBC) to On or Off.
On: Video CDs with PBC are played according to the PBC.
Off: Video CDs with PBC are played the same way as Audio CDs.

Auto Play DVD

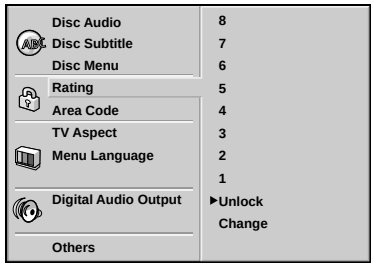
You can set up the DVD Player so a DVD disc automatically starts playing whenever the DVD is inserted. If Auto Play mode is set to On, this DVD player will search a title that playback time is long most and then play back the title automatically.
On: Auto Play function is activated.
Off: Auto Play function is not activated.

Note
The Auto Play function may not work for some DVDs.

Parental Control

Rating DVD

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



1 **Select "Rating" on the Setup menu using the ▲/▼ buttons.**

2 **While "Rating" is selected, press ▶.**

3 **When you have not entered a password yet.**
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press ENTER/OK. Enter the 4-digit password again and press ENTER/OK to verify.
When you have already entered a password;
Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press ENTER/OK.

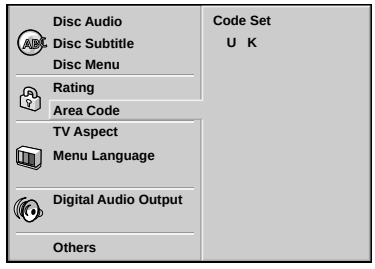
If you make a mistake before pressing ENTER/OK, press CLEAR and enter 4-digit security password again.

4 **Select a rating from 1 to 8 using ▲/▼ buttons.**
Level 1 : DVD software for adults cannot be played back.
Level 8 : All DVD software can be played back.
The limitation will be more severe as the level number is lower.
Unlock: *If you select Unlock, Parental Control is not active. The disc will play in full.*
Ratings 1 to 8: *Some discs contain scenes not suitable for children. If you set a rating for the DVD+VCR, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.*

5 **Press ENTER/OK to confirm your rating selection, then press SETUP to exit the menu.**

Area Code DVD

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See "Country/Area Code List", page 37).



1 **Select Area Code using the ▲/▼ buttons on the setup menu.**

2 **While Area Code is selected, press ▶.**

3 **Follow step 3 of "Rating" on left.**

4 **Select the first character using the ▲/▼ buttons.**

5 **Shift the cursor using ▶ button and select the second character using ▲/▼ buttons.**

6 **Press ENTER/OK to confirm your Area code selection, then press SETUP to exit the menu.**

Note
Confirmation of the 4-digit password is necessary when the password is changed (see "Changing the 4-digit Code" below).

Changing the 4-digit Code

1 Follow Steps 1-2 as shown above to the left (Rating).
2 Enter the old password, then press ENTER/OK.
3 Select Change using ▲/▼ buttons then press ENTER/OK.
4 Enter the new 4-digit password, then press ENTER/OK.
5 Enter exactly the same password a second time and verify by pressing ENTER/OK.
6 Press SETUP to exit the menu.

If you forget your 4-digit Code

If you forget your password, clear the current password by following the procedure below.

1 Press SETUP to display the setup menu.
2 Use the Number buttons to enter the 6-digit number "210499".
The 4-digit password is cleared.
3 Enter a new password as shown above to the left (Rating).

Playing a tape

You will only be able to load and eject video cassettes when your VCR is plugged into the mains.
Your VCR may also playback recordings from NTSC tapes (on PAL TV).

Getting a better picture
When a cassette is inserted and playback started, the automatic tracking function works to get the best possible picture automatically. If the quality of the recording is poor, repeatedly press ▲ or ▼ on the remote control to manually adjust the tracking until any distortions have been removed.

1 Make sure that you have correctly connected your VCR as described earlier in this book.
Turn on your TV.
Press I/⏻ to turn on your DVD+VCR.
Insert the video cassette into your DVD+VCR.
The video cassette should have the window side facing up and the arrow facing away from you.

2 Press **PLAY** ► to start playing your tape.
If you load a video cassette which has had its record protection tab removed, playback of the cassette will start automatically.

AUTO TRACKING
Your DVD+VCR will automatically adjust the tracking to give the best picture quality.
If noise bars appear during playback, adjust the tracking manually by pressing **PR/TRK+/-**.
To resume automatic tracking, press **AUTO TRK**.

3 Press **PAUSE/STILL** II/I► to still a picture.
Press **PAUSE/STILL** II/I► repeatedly to advance the tape frame by frame.
If you press **FWD** ►► or **SLOW** I►, the picture will be slowed down at about 1/19 times the normal playback.
Tapes can be paused for up to 5 minutes. After 5 minutes your DVD+VCR will stop the tape to prevent damaging the tape or your DVD+VCR .
Still picture quality can be improved slightly by using ▲ or ▼.

4 Press **PLAY** ► to continue playing your tape.

Picture search:
During playing back press either **REW** ◄◄ or **FWD** ►► to this will enable you to rapidly wind the tape (7 times normal playback) see where you are on the tape.

Logic search:
During fast forwarding or rewinding press and hold **REW** ◄◄ or **FWD** ►► the picture will be played back at 7 times normal playback speed.

5 **Slow motion playback**, **Shuttle :**
During playing back or still picture press ◄ or ►.
You can reach the following playback speeds.
(-7xplay, -3xplay, -play, still, 1/19 slow, play, 2xplay, 7xplay)
To switch off the slow motion and shuttle, press the desired function.
During slow motion and shuttle, the noise bars may appear on the picture according to the status of tape.
If distortions can be seen in the picture, reduce them with ▲ or ▼.

6 Press **STOP** ■ to end playback.
Press **EJECT** ⏏.
If the end of the tape is reached, your DVD+VCR will stop playback automatically, rewind, stop, eject the tape.

CM (Commercial Message) Skip:

This feature enables you during playback of a tape to skip a commercial break in a few seconds, then resume normal playback.
While tape is playing press **INSTANT SKIP** on the remote control to skip commercial (or another programme material).
Repeatedly press **INSTANT SKIP** to skip:
1 Press 30 seconds
2 Press 60 seconds
3 Press 90 seconds
4 Press 120 seconds
5 Press 150 seconds
6 Press 180 seconds

OPR (Optimum Picture Response)

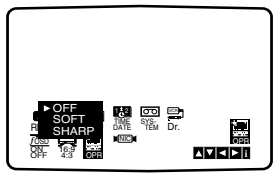
This feature automatically improves playback picture quality by adjusting your DVD+VCR to the condition of the tape.

1 Press **VCR MENU.**

2 Press ▲ or ▼ to select **OPR**.

3 Press **ENTER/OK**.

4 Press ▲ or ▼ repeatedly to select: **OFF**, **SOFT** or **SHARP**.
Please note you may only set OPR when playing a tape.



5 Press **VCR MENU** return to screen.

One-touch Timer Recording (OTR)

Your VCR allows you to make recordings using a variety of simple methods:
One-touch Timer Recording (OTR) start recording immediately for a set period of time or until the video cassette runs out.

Your DVD+VCR incorporates Long Play (LP) which enables you to record up to twice the amount of time on a video cassette. For example an E-180 will record up to 180 minutes using Standard Play (SP); using LP you will be able to record up to 360 minutes. Please note there will be a slight loss in picture and sound quality when using LP.

1 Make sure that you have correctly connected your VCR as described earlier in this book.
Press I/⏻ to turn on your VCR.

2 Insert a video cassette with protection tab into your VCR.
The video cassette should have the window side facing up and the arrow facing away from you.

3 Press ▲ or ▼ to select the **programme number** you wish to record.
You may also directly select programme number using the **numbered buttons** on the remote control.

4 If you wish to record directly from the SCART or RCA sockets repeatedly press **INPUT SELECT** until the socket you wish to record from is displayed.

AV 1 for recording from EURO AV1 SCART socket on the rear of your unit.
AV 2 for recording from EURO AV2 SCART socket on the rear of your unit.
AV 3 for recording from VIDEO IN and AUDIO IN (Left & Right) sockets on the front of your unit.

5 Press **SP/LP** if you wish to record in Long Play or Standard Play.
SP will produce improved picture and sound quality, however LP will provide twice as much recording time as SP.

6 Press **REC/OTR** on the remote to start recording.
RECORD will appear on the TV screen.
Press **REC** on your unit or press **REC/OTR** on the remote several times. Each successive press will increase the record time by 30 minutes until you reach a maximum of 9 hours.

7 Press **PAUSE/STILL** II/▮▶ to avoid recording unwanted scenes.
Press **PAUSE/STILL** II/▮▶ to continue recording.
Tapes can be paused for up to 5 minutes; RECP will be displayed when a tape is paused. After 5 minutes your DVD+VCR will stop recording to prevent damaging the tape or your DVD+VCR.

8 Within 5 seconds, press **STOP** ■ twice to end recording. This is to prevent accidental stopping of the recording.
Press **EJECT** ⏏.
EJECT will appear on the TV screen for a few seconds.

Notes

- If you do not wish to record on a tape (this can happen quite easily by accident!) remove the protection tab on the back edge of the video cassette.
- It is possible to record on a video cassette with the record protection tab removed by covering the hole with self adhesive tape.
- Remember you can record one programme while watching another by starting your instant recording, press **TV/VCR** to select TV mode and then selecting a different channel on your TV.

VIDEO Plus+ recording

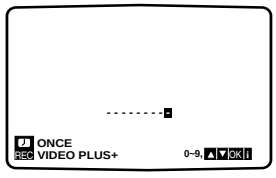
VIDEO Plus+ greatly simplifies entering the date, channel, start and end times of a Timer Recording by simply entering a PlusCode. PlusCodes are published in most TV guide magazines; they can vary one to nine numbers in length.

VIDEO Plus+ and Pluscode are registered trademarks of Gemstar development corporation. The VIDEO Plus+ system is manufactured under license from Gemstar development corporation.

Video Plus+ can only work successfully if TV channels have been tuned and stored in the order described on page 12 of this instruction book.

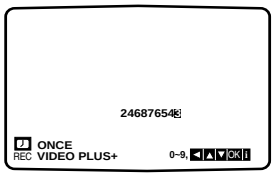
1 Make sure that TV channels have been tuned and stored in correct VIDEO Plus+ order.
Insert a video cassette with protection tab into your DVD+VCR.

2 Press **VIDEO Plus+**.

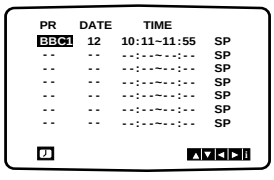


3 Press ▲ or ▼ to select the recording type.
ONCE: To record once.
DAILY: To record every day (except Saturday and Sunday) at the same time.
WEEKLY: To record at the same time every week.

4 Press the **numbered buttons** to enter the **PlusCode** of the TV programme that you wish to record.
If you make a mistake press ◀ then enter the revised number.

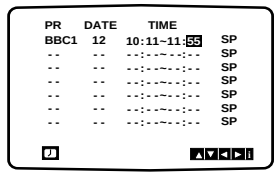


5 Press **ENTER/OK**.
If **PLEASE CHECK** is displayed it means that you have entered the wrong PlusCode, entered the PlusCode again.
If "**- -**" is displayed, you have to enter the programme number of the station, you want to

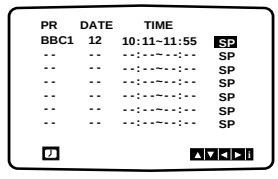


record from.

6 Press ◀ or ▶ to select the settings that you wish to revise. (PR, DATE, TIME, PDC and SP).
Press ▲ or ▼ to enter the correct information.



7 Press ▲ or ▼ to switch VPS/PDC on or off.
Press ▶ to select the recording speed.
Press ▲ or ▼ to select the desired tape speed (SP, IP, or LP).
IP mode determines how much tape is left and switches speed from SP to LP, if necessary, to complete recording the program.
IP mode is not selected when VPS/PDC is ON.
Check that the timer event details are correct.
If you wish to record from AUDIO IN and VIDEO IN on the front or from either of the EURO SCART sockets on the back of VCR, press INPUT SELECT



to select for correct display (AV1, AV2 or AV3).

8 If you want to make another VIDEO Plus+ recording repeat stages **2 - 7**.
Press **VCR MENU** twice to return to TV Picture.

If **PLEASE CHECK** is displayed, you have entered incorrect information and will need to re-enter the data.
Press I/⏻ to switch your DVD+VCR power off mode.
TIMER will appear in the DVD+VCR's display window while your VCR waits to make the recording. To watch a DVD during timer recording standby mode, press I/⏻ and DVD to switch to DVD mode.

Notes

- **Programme Delivery Control (PDC)**
  The Programme Delivery Control (**PDC**) system adjusts the start and end times of a timer record event. This can be particularly
  useful with sports events which may run over into extra time. The PDC signal is transmitted by the broadcaster and this controls your video recorder's timer. Currently only a limited number of TV companies transmit PDCsignals. Please make sure that when recording from channels that do not broadcast PDC that you turn PDC OFF.

Timer recording using On Screen Display

You may set up to seven timer record events within one month of the current date.

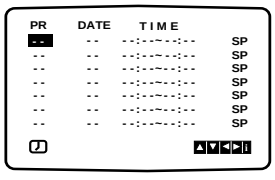
Note

Before setting the timer make sure that you have set the DVD+VCR clock correctly and you know which stations you have tuned TV stations on your DVD+VCR.

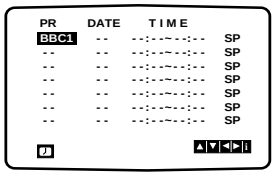
1 Insert a video cassette with protection tab into your DVD+VCR.
The video cassette should have the window side facing up and the arrow facing away from you.

2 Press **VCR MENU**.
Press ◄ or ► to select **REC**.
Press **ENTER/OK**.

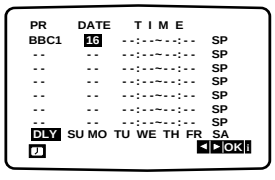
3 Press **ENTER/OK** to start setting the timer record event.
If all timer record events are full press ▲ or ▼ to select the event that you wish to remove and replace.
Press ◄ to delete the event.



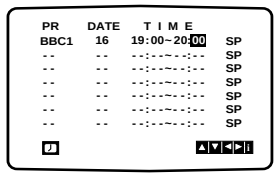
4 Press the **numbered buttons** to enter the station that you wish to record.
When selecting stations 1 - 9, press 0 first, then the channel number; for example Stations 3 - 03. You may also select Channels by pressing ▲ or ▼.
Once selected press ►.
If you wish to record from AUDIO IN (L/R) and VIDEO IN on the front or from the EURO SCART sockets on the back of your unit, press INPUT SELECT to select for correct display (AV1, AV2 or AV3).



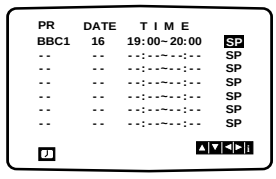
5 Press the **numbered buttons** to enter the date of the programme.
If you press **ENTER/OK** before entering the date you may select one of the following automated recording features. Press ◄ or ► to select, then press **ENTER/OK** to confirm.
DLY To record every day (except Saturday and Sunday) at the same time.
Weekly To record at the same time every week.



6 Press the **numbered buttons** to enter the recording start and end times of the programme that you wish to record.
Please note your DVD+VCR uses a 24 hour clock. e.g. 1pm will be displayed as 13:00.
You may also select the start and end times by using ▲ or ▼.



7 Press ▲ or ▼ to switch VPS/PDC on or off.
Press ► to select the recording speed.
Press ▲ or ▼ to select the desired tape speed (SP, IP, or LP).
IP mode determines how much tape is left and switches speed from SP to LP, if necessary, to complete recording the program. IP mode is not selected when VPS/PDC is ON.



8 Press **VCR MENU** to set another timer record event and follow steps 3 to 7.
Check that the timer event details are correct.
Press **VCR MENU** twice.

If **PLEASE CHECK** is displayed, you have entered incorrectly and will need to re-enter the data.
Press I/⏻ to switch your DVD+VCR Standby.
TIMER will appear in the display window while your DVD+VCR waits to make the recording.

9 Within 5 seconds, press I/⏻ twice to end recording.

Notes

- If at a later date you wish to **delete** or **change** any of the settings in timer event memory you may do so without having to enter all the timer event information again. Simply display the timer event screen. Use ▲ or ▼ to select the event that you wish to **delete** or **change**.
  Press ◄ to delete the event...or
  Press **ENTER/OK** to change; then press ◄ or ► to select; Station, Date, Start and End times and LP. Press ▲ or ▼ to enter the correct information.

- **If Timer record events Overlap...**

Make sure that the preset times of the timer recording events do not overlap. If they do, the earlier programme will always be given priority.

Example:
Programme 1 is programmed to start at 16:00 and end at 17:00.
Programme 2 is programmed to start at 16:30 and end at 17:30.
(In this case, Programme 1 will be recorded in its entirety, but only the last 30 minutes of Programme 2 will be recorded.)

- To watch a DVD while performing a timer recording, press **TV/VCR** to select VCR mode.

Playing a DVD and Video CD

Playback Setup DVD VCD2.0 VCD1.1

- Turn on the TV and select the video input source connected to the DVD player.
- Audio system: Turn on the audio system and select the input source connected to the DVD player.

1 **Press OPEN/CLOSE to open the disc tray.**

2 **Load your chosen disc in the tray, with the playback side down.**
When a double-sided DVD is inserted, make sure the side you want to play is facing up.

3 **Press OPEN/CLOSE to close the tray.**
READING appears on the TV screen, and playback starts automatically. If playback does not start, press **PLAY** ▶.
In some cases, the disc menu might appear instead.

4 **To stop the playback, press STOP ■.**

Press OPEN/CLOSE to remove the disc and then press OPEN/CLOSE again to close the tray press I/⏻ to turn off the unit.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD which offer a menu.

DVD

Use the ◀ ▶ ▲ ▼ buttons to select the title/chapter you want to view, then press **ENTER/OK** to start playback.
Press **TOP MENU** or **MENU** to return to the menu screen.

VCD2.0

- Use the number buttons to select the track you want to view.
  Press **RETURN** to return to the menu screen.
- Menu setting and the exact operating procedures for using the menu may differ depending on the disc. Follow the instructions on the each menu screen. You also may set PBC to Off under setup. See page 19.

Notes

– If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see "Parental Control", on page 20).
– DVDs may have a region code.
Your player will not play discs that have a region code different from your player. The region code for this player is 2 (two).

General Features

Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

When a disc has more than one title, you can move to another title as follows:

- Press **DISPLAY**, then press the appropriate numbered button (0-9) to select a title number.

Moving to another CHAPTER/TRACK

DVD **VCD1.1**

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press **SKIP** ▶▶I or I◀◀ briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press **SKIP** I◀◀ twice briefly to step back to the previous chapter/track.
- To go directly to any chapter during DVD playback, press **DISPLAY**. Then, press ▲/▼ to select chapter/track icon. Then, enter the chapter/track number using the numbered buttons (0-9).

Note

For two-digit numbers, press the numbered buttons (0-9) in rapid succession.

Search DVD VCD2.0 VCD1.1

1 Press **REW** ◀◀ or **FWD** ▶▶ during playback.
The player will now go into SEARCH mode.
2 Press **REW** ◀◀ or **FWD** ▶▶ repeatedly to select the required speed:
◀◀X2, ◀◀X4, ◀◀X16, ◀◀X100 (backward) or ▶▶X2, ▶▶X4, ▶▶X16, ▶▶X100 (forward).
With a Video CD, the Search speed changes:
◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).
3 To return to playback, press **PLAY** ▶.

Still Picture and Frame-by-Frame Playback

DVD **VCD2.0** **VCD1.1**

1 Press **PAUSE/STEP** II/I▶ during playback.
The player will now go into PAUSE mode.
2 You can advance the picture frame-by-frame by pressing **PAUSE/STEP** II/I▶ repeatedly on the remote control.

General Features (continued)

Slow Motion DVD VCD2.0 VCD1.1

1 Press **SLOW** during playback or still mode.
The player will enter SLOW mode.
2 Press **SLOW** repeatedly to select the required speed : 1/16, 1/8, 1/4 or 1/2 (forward).
3 To exit slow motion mode, press PLAY.

Random Karaoke DVD VCD2.0 VCD1.1

1 Press **RANDOM** during playback or in stop mode. The unit automatically begins Random Playback and "RANDOM" appears on the TV screen.
2 To return to normal playback, press **RANDOM** again until "NORMAL" appears on the TV screen.

Tips
By pressing SKIP or during Random playback, the unit selects another title (track) and resumes Random playback.

Note
- This function only works with DVD karaoke discs and video CD without PBC.
- On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Random function. See page 19.

Repeat DVD VCD2.0 VCD1.1

DVD Video Discs - Repeat Chapter/Title/Off

1 To repeat the currently playing chapter, press **REPEAT**.
The Repeat Chapter icon appears on the TV screen.
2 To repeat the title currently playing, press **REPEAT** a second time.
The Repeat Title icon appears on the TV screen.
3 To exit Repeat mode, press **REPEAT** a third time.
The Repeat Off icon appears on the TV screen.

Video CDs - Repeat Track/All/Off

1 To repeat the track currently playing, press **REPEAT**.
The Repeat Track icon appears on the TV screen.
2 To repeat the disc currently playing, press **REPEAT** a second time.
The Repeat All icon appears on the TV screen.
3 To exit Repeat mode, press **REPEAT** a third time.
The Repeat Off icon appears on the TV screen.

Note
On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Repeat function. See page 20.

Repeat A-B DVD VCD2.0 VCD1.1

To repeat a sequence in a title:

1 Press **A-B RPT** at your chosen starting point.
"A *" appears briefly on the TV screen.
2 Press **A-B RPT** again at your chosen end point.
"A B" appears briefly on the TV screen, and the repeat sequence begins ("A ⟷ B" appears the display window).
3 To cancel the sequence, press **A-B RPT**.

Time Search DVD

The Time Search function allows you to start playing at any chosen time on the disc.

1 Press **DISPLAY** during playback. The on-screen display appears on the screen.
The Time Search box shows the elapsed playing time of the current disc.
2 Within 10 seconds, press ▲/▼ to select the Time Search icon in the on-screen display.
The "-:--:--" appears in the Time Search box.
3 Within 10 seconds, use the number buttons to enter the required start time. Enter hours, minutes, and seconds from left to right in the box.
If you enter the wrong numbers, press CLEAR to remove the numbers you entered. Then enter the correct numbers.
4 Within 10 seconds, press ENTER/OK to confirm the start time.
Playback starts from the selected time on the disc. If you enter an invalid time, playback will continue from the current point.

3D Surround DVD VCD2.0 VCD1.1

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

1 Press DISPLAY during playback.
2 Use ▲/▼ to select the sound icon.
The sound option will be highlighted.
3 Use ◀/▶ to select "NORM.", "3D SUR" or "DIALOGUE".

Note
"DIALOGUE" is only applicable to DVD discs.

Screen Saver

A screen saver image appears when you leave the DVD Player in stop mode for about five minutes.

General Features (continued)

Zoom DVD VCD2.0 VCD1.1

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1 Press **ZOOM** during playback or still playback to activate the Zoom function.
If you press **ZOOM** repeatedly, the magnification level increase up to six steps

2 Use the ◄ ► ▲ ▼ buttons to move through the zoomed picture.

3 Press **CLEAR** to resume normal playback or return to the paused image.

Note
The zoom function may not work for some DVDs.

Marker Search DVD VCD2.0 VCD1.1

You can start playback from a memorized point. Up to nine points can be memorized.
To enter a mark, follow these steps.

1 During disc playback, press **MARKER** when playback reaches the spot that you want to memorize.
The Marker icon will appear on the TV screen briefly.

2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

1 During disc playback, press **SEARCH**.
The MARKER SEARCH menu will appear on the screen.

2 Within 10 seconds, press ◄/► to select a Marker number that you want to recall.

3 Press **ENTER/OK**.
Playback will start from the Marked scene.

4 To remove the MARKER SEARCH menu, press **SEARCH**.

To clear a Marked Scene

1 During disc playback, press **SEARCH**.
The Marker Search menu will appear on the screen.

2 Within 10 seconds, press ◄/► to select a Marker number that you want to erase.

3 Press **CLEAR**.
The Marker number will be erased from the list.

4 Repeat steps 2 and 3 to erase additional Marker numbers.

5 To remove the MARKER SEARCH menu, press **SEARCH**.

One Touch Replay DVD VCD2.0 VCD1.1

Press **INSTANT REPLAY** during playback and the disc will reverse picture search through 10 seconds of playback. And then the playback will start from the point again.

Special DVD Features DVD

Checking the contents of DVD Video discs: Menus

DVDs may offer menus that allow you to access special features. To use the disc menu, press **MENU**.
Then, press the appropriate number button to select an option. Or, use the ◄/►/▲/▼ buttons to highlight your selection, then press **ENTER/OK**.

Title Menu DVD

1 Press **TOP MENU**.
If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.

2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.

3 To remove the title menu, press **TOP MENU** again.

Disc Menu DVD

1 Press **MENU**.
The disc menu is displayed.

2 To remove the disc menu, press **MENU** again.

Camera Angle DVD

If the disc contains sequences recorded from different camera angles, the angle icon blinks on the TV screen. You can then change the camera angle if you wish.

- Press **ANGLE** repeatedly during playback to select a desired angle.
The number of the current angle appears on the display.

Changing the Audio Language DVD

Press **AUDIO** repeatedly during playback to hear a different audio language or audio track.

Changing the Audio Channel

VCD2.0 VCD1.1

Press **AUDIO** repeatedly during playback to hear a different audio channel (STEREO, LEFT or RIGHT).

Subtitles DVD

Press **SUBTITLE** repeatedly during playback to see the different subtitle languages.

Note
If ⃠ appears, the feature is not available on the disc.

Operation with Audio and MP3/WMA Disc

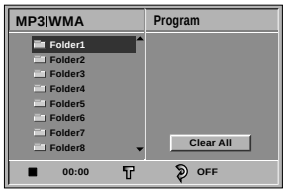
Playing an Audio CD and MP3/WMA Disc

CD **MP3** **WMA**

The DVD Player can play MP3/WMA formatted recordings on CD-ROM, CD-R or CD-RW discs.
Before playing MP3/WMA recordings, read the notes on MP3/WMA Recordings on right.

1 **Insert a disc and close the tray.**
Audio CD; Audio CD menu appears on the TV screen go to step 4.
MP3/WMA disc; The MP3/WMA-JPEG choice menu appears on the TV screen go to step 2.

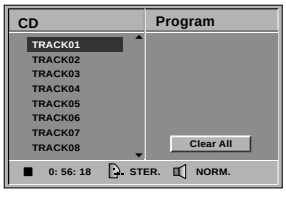
2 **Use ▲/▼ to select the MP3/WMA then press ENTER/OK.**
The MP3/WMA menu appears on the TV screen.
Press RETURN to move to the MP3/WMA-JPEG



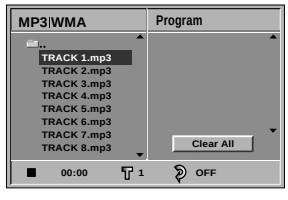
choice menu.

3 **Use ▲/▼ to select a folder then press ENTER/OK.**
A list of files in the folder appears.

4 **Use ▲/▼ to select a track then press PLAY ► or ENTER/OK.**
Playback starts.
During playback, the current track's elapsed playing time will appear on the display window and menu.
Playback will stop at the end of the disc.
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.



Audio CD menu



MP3/WMA menu

Tip
If you are in a file list and want to return to the Folder list, use the ▲/▼ to highlight .. and press ENTER/OK to return to the previous menu screen.

5 **To stop playback at any other time, press STOP ■.**

Notes on MP3/WMA Recordings

About MP3

- An MP3 file is audio data compressed by using the MPEG1 audio layer-3 file-coding scheme. We call files that have the ".mp3" file extension "MP3 files".
- The player cannot read an MP3 file that has a file extension other than ".mp3".

About WMA(Window Media Audio)

- An WMA file is a Microsoft audio compression technology.
- WMA(Windows Media Audio) offers double the audio compression of the MP3 format.

MP3/WMA Disc compatibility with this player is limited as follows:

1. Sampling Frequency / only at 44.1kHz (MP3), 22.05 - 44.1kHz (WMA)
2. Bit rate / within 32 - 320kbps (MP3), 32 - 128kbps (WMA)
3. CD-R physical format should be "ISO 9660"
4. If you record MP3/WMA files using the software which cannot create a FILE SYSTEM, for example "Direct-CD" etc., it is impossible to playback MP3/WMA files. We recommend that you use "Easy-CD Creator", which creates an ISO9660 file system.
5. A single session disc requires MP3/WMA files in the first track. If there is no MP3/WMA file in the 1st track, it cannot playback MP3/WMA files. If you wish to playback MP3/WMA files, format all the data in the disc or use a new one.
6. File names should be named using 8 letters or less and must incorporate ".mp3" or ".wma" extension e.g. "********.MP3" or "********.WMA".
7. Do not use special letters such as "/ : * ? " < > " etc.
8. Total number of files on the disc should be less than 650.

This DVD player requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 or WMA files). That require certain pre-existing conditions (see above) to insure compatible playback.

Customers should also note that permission is required in order to download MP3/WMA files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.

Pause CD MP3 WMA

1 Press **PAUSE/STEP** ⏸/⏭ during playback.

2 To return to playback, press **PLAY** ▶ or press **PAUSE/STEP** ⏸/⏭ again.

Moving to another Track CD MP3 WMA

- Press **SKIP** ⏭ or ⏮ briefly during playback to go to the next track or to return to the beginning of the current track.
- Press **SKIP** ⏮ twice briefly to step back to the previous track.
- In case of audio CD, to go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD MP3 WMA

1 To repeat the track currently playing, press **REPEAT**.
The Repeat icon and "TRACK" appears on the menu screen.

2 To repeat all tracks on a disc, press **REPEAT** a second time.
The Repeat icon and "ALL" appears on the menu screen.

3 To cancel Repeat mode, press **REPEAT** a third time.
The Repeat icon and "OFF" appears on the menu screen.

Search CD MP3 WMA

1 Press **REW** ◀◀ or **FWD** ▶▶ during playback.
The player will now go into **SEARCH** mode.

2 Press **REW** ◀◀ or **FWD** ▶▶ repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).
Search speed and direction are indicated on the menu screen.

3 To exit SEARCH mode, press **PLAY** ▶.

Random CD MP3 WMA

1 Press **RANDOM** during playback or when playback is stopped.
The unit automatically begins Random Playback and "RAND." appears on the menu screen.

2 To return to normal playback, press **RANDOM**.
"RAND." disappears on the menu screen.

Repeat A-B CD

To repeat a sequence.

1 During disc playback, press **A-B RPT** at your chosen starting point.
The Repeat icon and "A ⋆ " appears on the menu screen.

2 Press **A-B RPT** again at your chosen end point.
The Repeat icon and "A B" appears on the menu screen, and the sequence begins to play repeatedly.

3 To exit the sequence and return to normal play, press **A-B RPT** again.
The Repeat icon and "OFF" appears on the menu screen.

3D Surround CD

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

1 Press **DISPLAY** or **AUDIO** during playback.

2 Use ◀/▶ to select the sound icon.
The sound option will be highlighted.

3 Use ▲/▼ to select "NORM.", or "3D SUR".

Changing the Audio Channel CD

Press **AUDIO** repeatedly during playback to hear a different audio channel (STER., LEFT, or RIGHT).

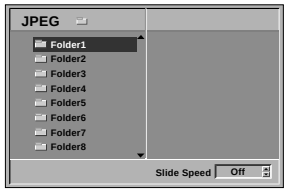
Operation with JPEG Disc

Viewing a JPEG disc JPEG

This DVD+VCR can play discs with JPEG files. Before playing JPEG recordings, read the notes on JPEG Recordings on right.

1 Insert a disc and close the tray.
The MP3/WMA-JPEG choice menu appears on the TV screen.

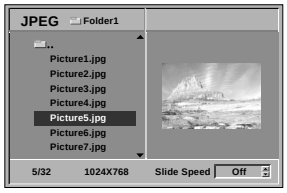
2 Press ▲/▼ to select the JPEG then press ENTER/OK.
The JPEG menu appears on the TV screen.



3 Press ▲/▼ to select a folder then press ENTER/OK.
A list of files in the folder appears.
Press RETURN to move to the MP3/WMA-JPEG choice menu.

Tip
If you are in a file list and want to return to the Folder list, use the ▲/▼ buttons on the remote to highlight " .. " and press ENTER/OK to return to the previous menu screen.

4 If you want to view a particular file, press ▲/▼ to highlight a file and press ENTER/OK or PLAY ▶.
Viewing the file proceeding starts.
During viewing a file, press RETURN to move to the previous menu (JPEG menu).
Press TOP MENU to move to the next page.
Press MENU to move to the previous page.



Tip
There are three viewing Slide Speed options: Fast, Normal, Slow, and Off. Press ◀/▶ to highlight the Slide Speed then press ▲/▼ to select the option you want to use, and press ENTER/OK.

5 To stop viewing at any other time, press STOP ■.
The JPEG menu appears.

Moving to another File

Press **SKIP** ⏮ or ⏭ once during viewing a picture to advance to the next file or to the previous file.

Still Picture

1 Press **PAUSE/STEP ⏸/⏯** during slide show.
The player will now go into PAUSE mode.
2 To return to the slide show, press **PLAY ▶** or press **PAUSE/STEP ⏸/⏯** again.

To flip the picture

Press ▲/▼ during showing a picture to flip the picture horizontally or a vertically.

To rotate picture

Press ◀/▶ during showing a picture to rotate the picture clockwise or counter clockwise.

Notes on JPEG Recordings

- Depending upon the size and number of the JPEG files, it could take a long time for the DVD+VCR to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files are too big — reduce the resolution of the JPEG files to less than 2 mega pixels and burn another disc.
- Total number of files and folders on the disc should be less than 650.
- Some disc may be incompatible due to different recording format or condition of disc.
- When you are using software such as "Easy CD Creator" to burn the jpeg files into the CD-R, ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.
- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" files.
- File names without ".jpg" extension will not be able to be read by this DVD+VCR. Even though the files are shown as JPEG image files in windows explorer.

Programmed Playback CD VCD2.0 VCD1.1 MP3 WMA

Programmed Playback with Audio CD and MP3/WMA Disc

The Program function enables you to store your favorite tracks from any disc in the player memory.

Program can contain 30 tracks.

1 Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.

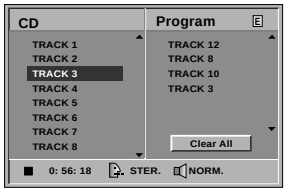
The E mark will appear to the right of the word Program on the right side of the menu screen.

Note

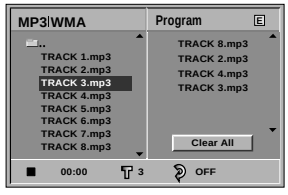
Press PROGRAM to exit the Program Edit mode; the E mark will disappear.

2 Select a track, then press ENTER/OK to place the selected track on the Program list.

3 Repeat step 2 to place additional tracks on the Program list.



Audio CD menu



MP3/WMA menu

4 Press ▶.

The programmed track you selected last is highlighted on the program list.

5 Press ▲/▼ to select the track you want to start playing.

Press TOP MENU to move to the next page.
Press MENU to move to the previous page.

6 Press PLAY ▶ to start.

Playback begins in the order in which you programmed the tracks and "PROG." appears on the menu screen. Playback stops after all of the tracks on the Program list have played once.

7 To resume normal playback from programmed playback, press PROGRAM.

Select a track of CD (or MP3/WMA) list and then press ENTER/OK.

"PROG." indicator disappears on the menu screen.

Programmed Playback with Video CD

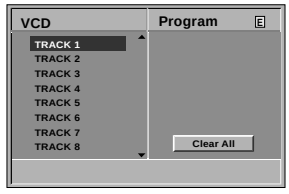
Note

On a Video CD with PBC, you must set PBC to Off on the setup menu to use the Program function. See page 19.

1 Insert Video CD and close the tray.

2 Press PROGRAM while playback is stopped.

The VCD Program menu will appear.



Note

Press RETURN or PROGRAM to exit the Program menu.

3 Follow steps 2-6 of "Programmed Playback with Audio CD and MP3/WMA disc" on left.

4 To resume normal playback from programmed playback, press PROGRAM.

"PROG." indicator disappears in the display window.

Repeat Programmed Tracks

- To repeat the track currently playing, press **REPEAT**. The Repeat icon and "TRACK" appears on the menu screen.
- To repeat all tracks on the program list, press **REPEAT** a second time. The Repeat icon and "ALL" appears on the menu screen.
- To cancel Repeat mode, press **REPEAT** a third time. The Repeat icon and "OFF" appears on the menu screen.

Erasing a Track from Program List

1 Press **PROGRAM** during playback (Audio CD and MP3/WMA disc only) or in the stop mode to enter the Program Edit mode.
The E mark will appear.
2 Press ▶ to move to the Program list.
3 Use ▲/▼ to select the track that you wish to erase from the Program list.
4 Press CLEAR.
The track will be erased from the Program list.

Erasing the Complete Program List

1 Follow steps 1-2 of "Erasing a Track from Program List" as above.
2 Use ▲/▼ to select "Clear All", then press **ENTER/OK**.
The complete Program for the disc will be erased.
The programs are also cleared when the disc is removed.

Hi-Fi Stereo Sound System

Your VCR will record and playback Hi-Fi stereo sound. In addition it has a stereo NICAM digital stereo sound decoder. This allows you to record and playback the sound in several different ways. Video cassettes recorded on your VCR will have a normal mono audio track and two VHS Hi-Fi stereo audio tracks. These stereo tracks allow you to make audio recordings in Hi-Fi stereo or bilingual mode from a TV broadcast, stereo audio system, video disc or another Hi-Fi VCR.

1 Your VCR's NICAM digital sound decoder allows you to enjoy broadcasts with NICAM sound, as well as standard stereo, bilingual and mono sound. The particular type of sound received or that recorded will be briefly displayed on the TV screen for a couple of seconds:
STEREO NICAM
Sound is automatically recorded on the Hi-Fi stereo and mono tracks of the video tape.
BIL NICAM
Both audio channels will be recorded on the Hi-Fi stereo tracks. The primary language channel (left) will be recorded on the mono track of the video tape.
MONO
The sound is recorded on the Hi-Fi tracks and the mono track of the video tape without any separation.

2 Press **AUDIO** repeatedly until the desired audio mode appears.

3 The choice is **STEREO**, **LEFT**, **RIGHT** and **MONO**. In **BIL NICAM** playback the primary language is output on the left channel and the secondary channel is output simultaneously from the right channel when audio output is set to **STEREO**. The primary language will be output from both channels when the audio setting is **MONO**.
Please note that when adjusting the tracking control Hi-Fi stereo sound may revert to **MONO**.

Blank Search

The Blank Search enables you to locate the end of any recording. Whenever a recording creates, a blank content is recorded on the tape.
Press **BLANK SEARCH** in the stop mode and rapidly advanced to find blank content.
To find next blank content, press **BLANK SEARCH** again.

On Screen Display (F.OSD)

You may easily display the current time or tape counter, amount of tape left, day, month, year, day of week, programme channel, tape speed and operational mode of your DVD+VCR on the TV screen. If a recording is taking place these On Screen Displays will not be recorded onto the tape.

1 Press **CLK/CNT** to display.
Press **CLK/CNT** repeatedly to cycle through the display options. The tape counter and amount of tape left will appear if there is a tape loaded.

2 After 3 seconds the majority of the On Screen Displays will clear leaving only the clock or tape counter and the amount of tape left on the screen.
Press **CLK/CNT** again to remove all displays from the TV screen.

Note
It cannot display when F.OSD is OFF.

Tape Counter Memory Stop

The **Digital Tape Counter** can be displayed on the display window instead of the time by pressing **DISPLAY** on the remote control. The Digital Tape Counter indicates the relative positions of recordings on the tape.

1 Press **CLK/CNT**.
Press **COUNTER RESET** to set the counter to 0:00:00.
Press **PLAY** ▶ or start recording.
The tape counter will display the actual play time in hours, minutes and seconds.

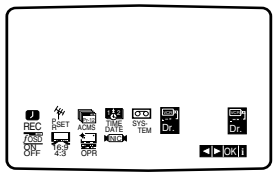
2 Press **STOP** ■ when playback or recording is complete.
Press **REW** ◀◀.
The tape will rewind and automatically stop when the counter returns to 0:00:00.

Note
To rewind to the beginning of the tape, press ◀◀ again.

Video Doctor (Self-Diagnosis)

This feature informs you that there is a problem with your VCR. These error messages will appear on the TV screen.

1 Press **VCR MENU**.
Press ◄ or ► to select **Dr**.
Press **ENTER/OK**.



2 Press ▲ or ▼ to check a problem.
HEAD STATUS
- **PLEASE CLEAN:**
  Clean your video heads.

TAPE STATUS
- **NOT RECORDABLE:**
  Insert a tape with its protection tab in place

NO. OF TIMER PROGRAMME
- **2**
  Shows the number of timer recording.

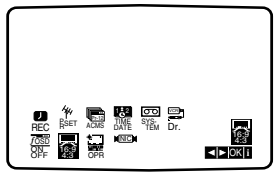
NEXT TIMER PROGRAMME
- **PR-01 26 10:00~11:00 SP**
  Shows the current status of timer recording.

3 Press **VCR MENU** to remove the menus from the TV screen.

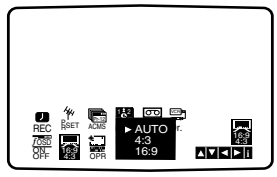
Wide Screen Compatibility 16:9

Your VCR can record and play back wide screen aspect ratio programmes (16:9). To record a wide screen format programme successfully the correct type of wide screen signal must be broadcast by the TV station.

1 Switch on your VCR.
Press **VCR MENU**.
Press ◄ or ► to select **16:9/4:3**.
Press **ENTER/OK**.



2 Use ▲/▼ repeatedly to select: **AUTO, 4:3** or **16:9**.
AUTO:
Automatically plays back Wide-Screen programmes as Wide-Screen and Normal programmes as normal.
4:3
Only for playing back and recording Normal format recordings (4:3).
16:9:
Only for playing back and recording Wide-Screen format recordings (16:9).



3 Press **VCR MENU** to remove the menus from the TV screen.
To enjoy Wide-Screen playback you must connect your VCR to the TV using a SCART cable.

Copying from DVD To VCR

This unit allows you to copy the contents of a DVD to a VHS tape with a press of the **REC/OTR** button.

Note
If the DVD you are attempting to copy is copy protected, you may not be able to copy the disc.

1 **Insert Disc**
Insert the disc you wish to copy in the DVD deck and close the disc tray.

2 **Insert VHS Tape**
Insert a blank VHS videotape into the VCR deck.

3 **Press DVD so that the DVD indicator lights up.**

4 **Copy the DVD to VHS Tape**
Press the **REC** ● button on the unit front panel.
- The DVD will go into Play mode and the VCR will go into Record mode.
- If the DVD disc menu appears, you may need to press the Play button manually to begin copying.

5 **Stop the Copy Process.**
Within 5 seconds, press STOP ■ twice.

Recording from another video recorder

With this video recorder you can make recordings from an external source, such as copying from another video recorder or a camcorder.

Note
In the following description, this video recorder will be one used for recording and will be referred to as VCR B. The other appliance will be used for playback and will be referred to as VCR A.

1 VCR A should be connected to the SCART socket on the rear panel of your unit or the AV sockets on the front panel of your unit.

2 Insert the recorded tape into VCR A and a blank tape into VCR B.

3 To start recording, press the **REC** ● on VCR B and **PLAY** ► on VCR A.

4 When you want to finish copying, press **STOP** ■ twice within 5 seconds on this video recorder and then **STOP** ■ the VCR A.

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
DVD or VCR do not work properly.	• DVD or VCR button is not switched properly.	• Refer to page 6.
No power.	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
The power is on, but the DVD player does not work.	• No disc is inserted.	• Insert a disc. (Check that the DVD or, audio CD indicator in the display window is lit.)
No picture.	• The TV is not set to receive DVD signal output.	• Select the appropriate video input mode on the TV so the picture from the DVD player appears on the TV screen.
	• The video cable is not connected securely.	• Connect the video cable into the jacks securely.
No sound.	• The equipment connected with the audio cable is not set to receive DVD signal output.	• Select the correct input mode of the audio receiver so you can listen to the sound from the DVD player.
	• The audio cables are not connected securely.	• Connect the audio cable into the jacks securely.
	• The power of the equipment connected with the audio cable is turned off.	• Turn on the equipment connected with the audio cable.
	• The Digital Audio Output is set to the wrong position.	• Set the Digital Audio Output to the correct position, then turn on the DVD player again by pressing I/⏻.
The picture is poor.	• The disc is dirty. • The TV channels are not tuned in properly.	• Clean the disc. • Check tuning, carry out tuning again.
The DVD player does not start playback.	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type and Regional code.)
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
The remote control does not work properly.	• There is an obstacle in the path of the remote control and this unit.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.
Video tape cannot be inserted.	• Is the cassette compartment empty?	• Eject the tape in.
No Hi-Fi sound	• Audio mode is not set properly.	• Select “STEREO” by repeatedly pressing “AUDIO” on the remote control.
No NICAM sound recording	• NICAM mode is not set properly.	• Make sure NICAM in the menu is set to AUTO for the station to be recorded.

Video Head Cleaning

Dirt accumulating on the head after a long period of time can cause the playback picture to become blurred or broken up. High quality video cassette tapes will not normally deposit dirt onto the video head, but old or damaged tapes might. Clean the video heads with a commercially available video heads cleaning tape.

Language Code List

Enter the appropriate code number for the initial settings “Disc Audio”, “Disc Subtitle” and/or “Disc Menu” (See page 18).

Code	Language	Code	Language	Code	Language	Code	Language
6566	Abkhazian	7074	Fiji	7678	Lingala	8373	Singhalese
6565	Afar	7073	Finnish	7684	Lithuanian	8375	Slovak
6570	Afrikaans	7082	French	7775	Macedonian	8376	Slovenian
8381	Albanian	7089	Frisian	7771	Malagasy	8379	Somali
6577	Ameharic	7176	Galician	7783	Malay	6983	Spanish
6582	Arabic	7565	Georgian	7776	Malayalam	8385	Sudanese
7289	Armenian	6869	German	7784	Maltese	8387	Swahili
6583	Assamese	6976	Greek	7773	Maori	8386	Swedish
6588	Aymara	7576	Greenlandic	7782	Marathi	8476	Tagalog
6590	Azerbaijani	7178	Guarani	7779	Moldavian	8471	Tajik
6665	Bashkir	7185	Gujarati	7778	Mongolian	8465	Tamil
6985	Basque	7265	Hausa	7865	Nauru	8484	Tatar
6678	Bengali; Bangla	7387	Hebrew	7869	Nepali	8469	Telugu
6890	Bhutani	7273	Hindi	7879	Norwegian	8472	Thai
6672	Bihari	7285	Hungarian	7982	Oriya	6679	Tibetan
6682	Breton	7383	Icelandic	8065	Panjabi	8473	Tigrinya
6671	Bulgarian	7378	Indonesian	8083	Pashto, Pushto	8479	Tonga
7789	Burmese	7365	Interlingua	7065	Persian	8482	Turkish
6669	Byelorussian	7165	Irish	8076	Polish	8475	Turkmen
7577	Cambodian	7384	Italian	8084	Portuguese	8487	Twi
6765	Catalan	7465	Japanese	8185	Quechua	8575	Ukrainian
9072	Chinese	7487	Javanese	8277	Rhaeto-Romance	8582	Urdu
6779	Corsican	7578	Kannada	8279	Rumanian	8590	Uzbek
7282	Croatian	7583	Kashmiri	8285	Russian	8673	Vietnamese
6783	Czech	7575	Kazakh	8377	Samoan	8679	Volapük
6865	Danish	7589	Kirghiz	8365	Sanskrit	6789	Welsh
7876	Dutch	7579	Korean	7168	Scots Gaelic	8779	Wolof
6978	English	7585	Kurdish	8382	Serbian	8872	Xhosa
6979	Esperanto	7679	Laothian	8372	Serbo-Croatian	7473	Yiddish
6984	Estonian	7665	Latin	8378	Shona	8979	Yoruba
7079	Faroese	7686	Latvian, Lettish	8368	Sindhi	9085	Zulu

Country/Area Code List

Enter the appropriate code number for the initial setting “Area Code” (See page 20).

Code	Country/Area
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	Azerbaidjan
BA	Bosnia-Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Ivory Coast
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CS	Former Czechoslovakia
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
FM	Micronesia
FO	Faroe Islands
FR	France
FX	France (European Territory)
GA	Gabon
GB	Great Britain
GD	Grenada
GE	Georgia
GF	French Guyana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe (French)
GQ	Equatorial Guinea
GR	Greece
GS	S. Georgia & S. Sandwich Isls.
GT	Guatemala
GU	Guam (USA)
GW	Guinea Bissau
GY	Guyana
HK	Hong Kong
HM	Heard and McDonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia6
KI	Kiribati
KM	Comoros
KN	Saint Kitts & Nevis Anguilla
KP	North Korea
KR	South Korea
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Laos
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libya
MA	Morocco
MC	Monaco
MD	Moldavia
MG	Madagascar
MH	Marshall Islands
MK	Macedonia
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique (French)
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia (French)
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	Polynesia (French)
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and Miquelon
PN	Pitcairn Island
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion (French)
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan Mayen Islands
SK	Slovak Republic
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Saint Tome and Principe
SU	Former USSR
SV	El Salvador
SY	Syria
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tadjikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
UK	United Kingdom
UM	USA Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
VC	Saint Vincent & Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (USA)
VN	Vietnam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

Specification

General

Power requirements	AC 200-240V, 50Hz
Power consumption	23W
Dimensions (approx.)	430 X 97.5 X 360 mm (w/h/d)
Mass (approx.)	5.4 kg
Operating temperature	5˚C to 35˚C (41˚F to 95˚F)
Operating humidity	5 % to 90 %
Timer	24 hours display type
RF Modulator	UHF 22-68 (Adjustable)

System

Laser	Semiconductor laser, wavelength 650 nm
Video Head system	Double azimuth 6 heads, helical scanning.
Signal system	PAL
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 100 dB (DVD) More than 95 dB (CD)

Inputs (VCR)

Audio	-6.0dBm, more than 10 kohms (SCART) -6.0dBm, more than 47 kohms (RCA)
Video	1.0 Vp-p, 75 ohms, unbalanced (SCART/RCA)

Outputs (DVD)

VIDEO OUT	1 Vp-p 75 ohms, sync negative
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 Ω, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 Ω, RCA jack x 1
Audio output (optical audio)	5 V (p-p), 75 Ω, Optical connector x 1
Audio output (analog audio)	2.0 Vrms (1 kHz, 0 dB), 600 Ω, RCA jack (L, R) x 1/SCART (TO TV)

Outputs (VCR)

Audio	-6.0dBm, less than 1 kohms (SCART)
Video	1.0Vp-p, 75 ohms, unbalanced (SCART)

Outputs (VCR/DVD)

S-VIDEO OUT	(Y) 1.0 Vp-p 75 ohms, negative sync., Mini Din 4-pin x 1 (Y) 0.3 Vp-p 75 ohms

- Design and specifications are subject to change without notice.

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TOSHIBA

P/NO: 3834RP0099E

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MEMO

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

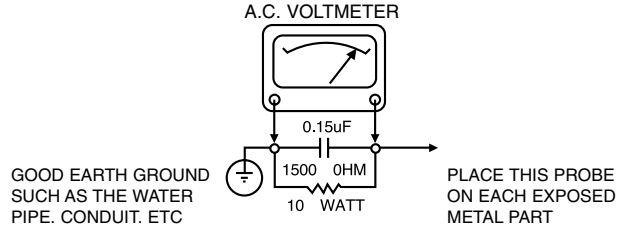
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUNING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.


A.C. VOLTMETER
0.15uF
1500 0HM
10 WATT
GOOD EARTH GROUND SUCH AS THE WATER PIPE. CONDUIT. ETC
PLACE THIS PROBE ON EACH EXPOSED METAL PART

SUBJECT: GRAPHIC SYMBOLS

THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSNTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRA TION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED. THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY, WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDER ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCES SIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTE GRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the VCR+DVD covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE* : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.
Remembers Safety First:

General Servicing Precautions

1. Always unplug the VCR+DVD AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this VCR+DVD or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with whitch instruments covered by this service manual might be equipped.

5. Do not apply AC power to this VCR+DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are cerrectly installed.

6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grouned-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified a “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protec tive package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SERVICE INFORMATION FOR EEPROM IC SETTING

EEPROM option code No. setting

NAME	HEX	BINARY
OPT1	00	00000000
OPT2	00	00000000
OPT3	00	00000000
OPT4	00	00000000
OPT5	00	00000000
OPT6	00	00000000

WR : OK I : EXIT MOVE : ◄ ►
EDIT : ▲▼

MASKROM : R00
EEPROM : R00 LG CODE

NAME	HEX	BINARY
SD-33VE-S-TB		
OPT1	BC	00000000
OPT2	63	00000000
OPT3	8B	00000000
OPT4	E4	00000000
OPT5	00	00000000
OPT6	40	00000000
SD-33VE-S-TE		
OPT1	FC	00000000
OPT2	63	00000000
OPT3	0B	00000000
OPT4	F0	00000000
OPT5	62	00000000
OPT6	40	00000000
SD-33VE-S-TL		
OPT1	FC	00000000
OPT2	63	00000000
OPT3	8B	00000000
OPT4	F1	00000000
OPT5	31	00000000
OPT6	4A	00000000

WR : OK I : EXIT MOVE : ◄ ►
EDIT : ▲▼

EEPROM option code No. setting procedure

1. DETECT NEW EEPROM (OPTION EDIT SCREEN)
   - Eeprom EDIT screen automatically appears if replacing Eeprom.
   - Setup option data using the cursor Up/Down key of a remote control.
     (Setup upon BOM depending on OPT1~OPT6 model)
   - Since an initial remote control is set to LG for LG model, appropriately set option data using the cursor Up/Down key.
   - For Toshiba model, Change a remocon key by using following JIG key.
     Toshiba MODEL : FRONT FF + FRONT CH UP (Three time) (LG/Toshiba CODE)

2. EEPROM WRITED COMPLETE SCREEN
   - Writes data on EEPROM by using REMOCON "OK".
   - If completing the option data screen with a menu key, Powering Off is automatically done and the option edit screen is arranged.

3. PG ADJUST
   1) Payback the SP standard tape
   2) Press the “1” key on the Remote controller and the “PLAY” key on the Front Panel at the same time, then it goes in to Tracking initial mode.
   3) Repeat the above step(No.2), then it finishes the PG adjusting automatically.
   4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

4. EEPROM INITIAL
   - SETUP is displayed in the field if pressing the FRONT REC KEY with the remocon number "CLEAR" key pressed in the status of no tape.
   - AUTO SEARCH is done since the initial screen of ACMS is serviced if powering On.
   - Check basic operation (PLAY/RECORD...)

SECTION 2

CABINET & MAIN CHASSIS

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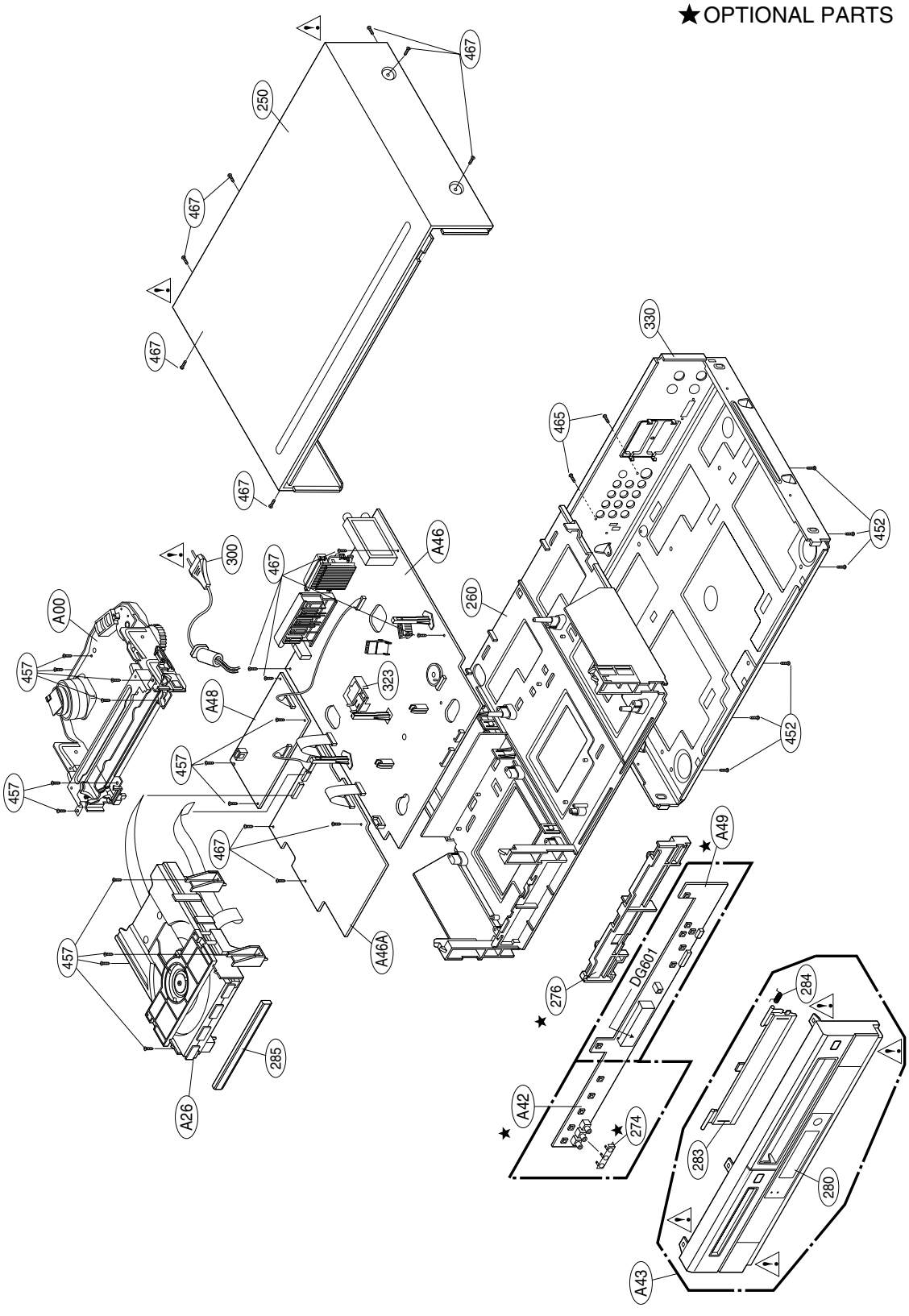
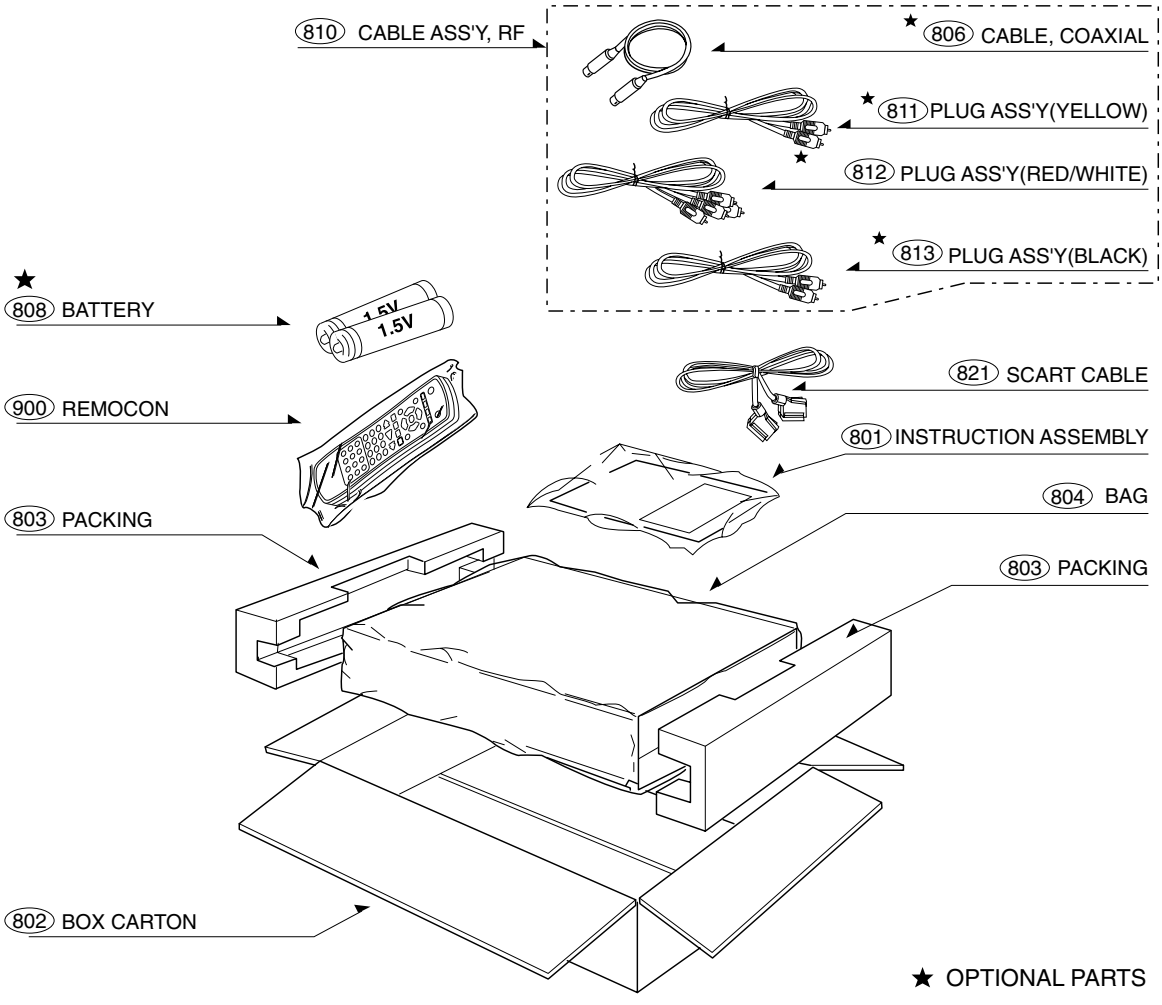
EXPLODED VIEWS

1. Cabinet and Main Frame Section

★OPTIONAL PARTS



2. Packing Accessory Section



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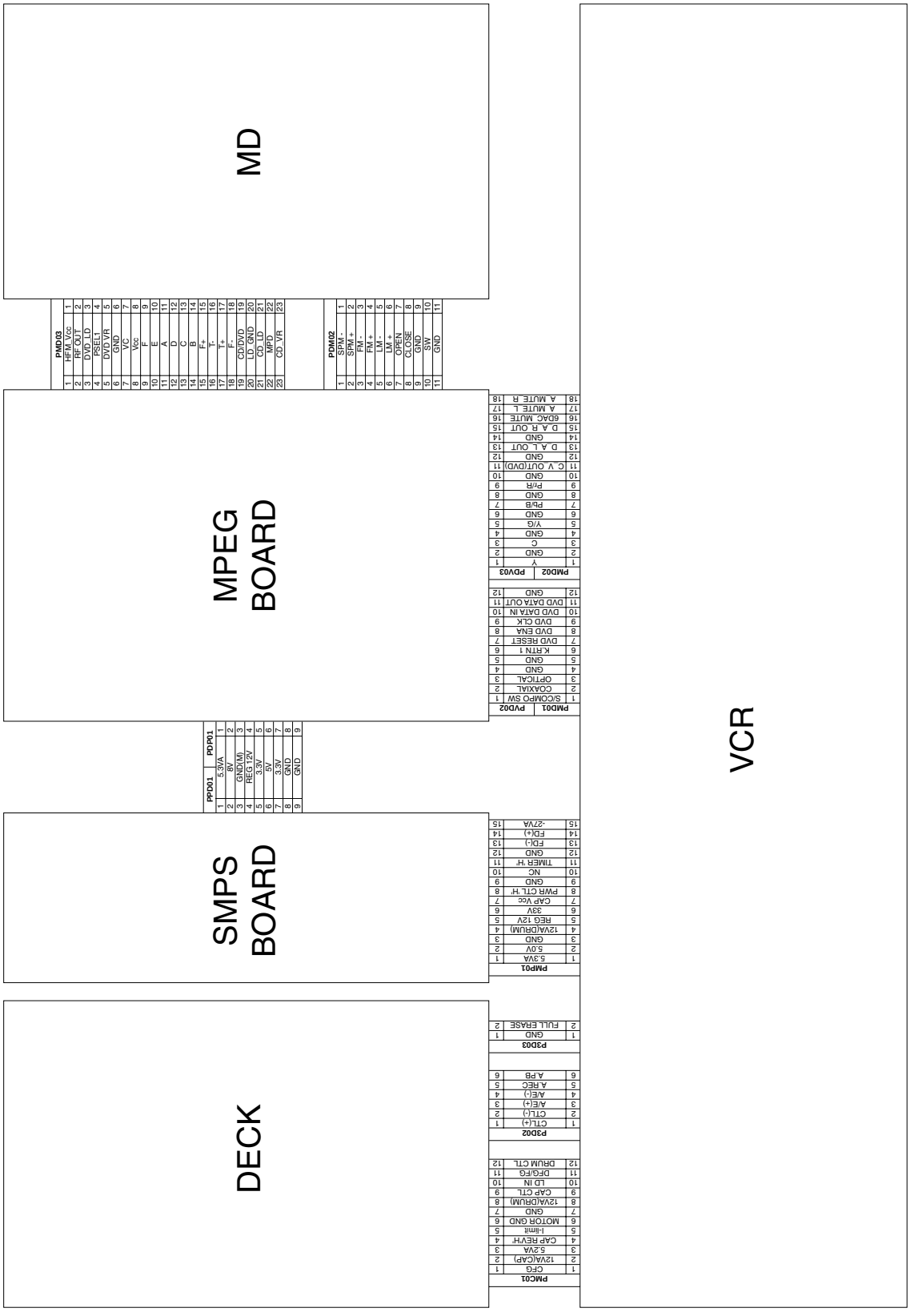
OVERALL WIRING DIAGRAM



VCR PART
ELECTRICAL ADJUSTMENT PROCEDURES

1. Servo Adjustment

1) PG Adjustment

• Test Equipment
a) OSCILLOSCOPE
b) PAL MODEL : PAL SP TEST TAPE

• Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(JP05, JP06)	R/C TRK JIG KEY	6.5 ± 0.5H

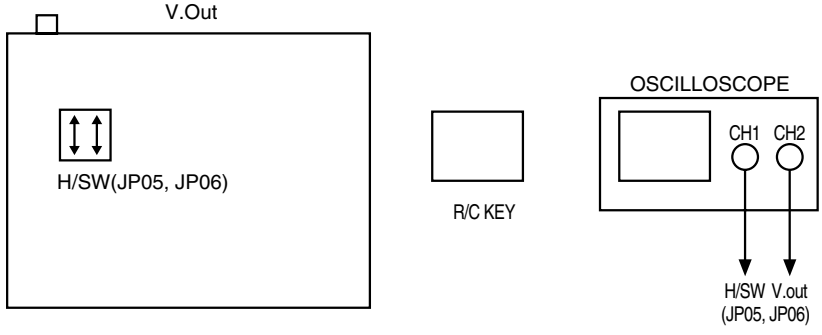
• Adjustment Procedure

a) Insert the SP Test Tape and play.
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the “ATR” is blink after the SP Test Tape is inserted.
b) Connect the CH1 of the oscilloscope to the H/SW(JP05, JP06) and CH2 to the Video Out for the VCR.
c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW(JP05, JP06), and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(JP05, JP06) signal to the starting point of the vertical synchronized signal, to 6.5H ± 0.5H (412μs, 1H=63μs).

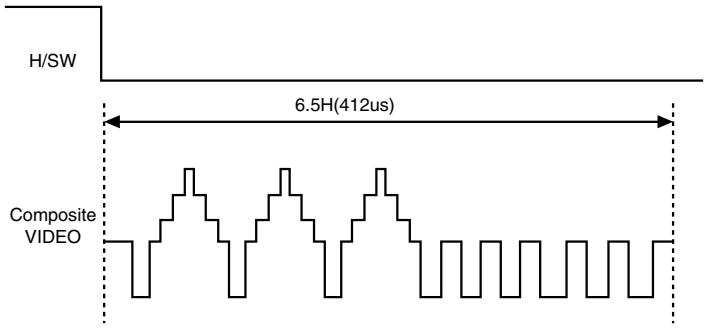
• PG Adjustment Method

a-1) Payback the SP standard tape
b-2) Press the “1” key on the Remote controller and the “PLAY” key on the Front Panel at the same time, then it goes into Tracking initial mode.
c-3) Repeat the above step(No.b-2), then it finishes the PG adjusting automatically.
d-4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

• CONNECTION



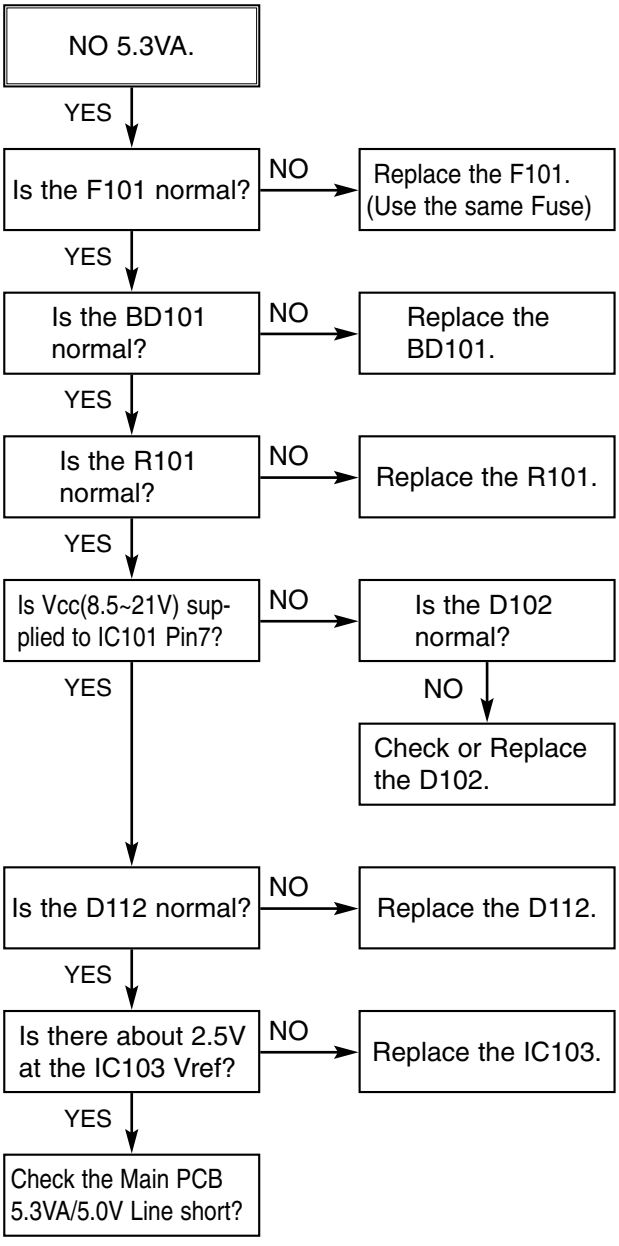
• WAVEFORM



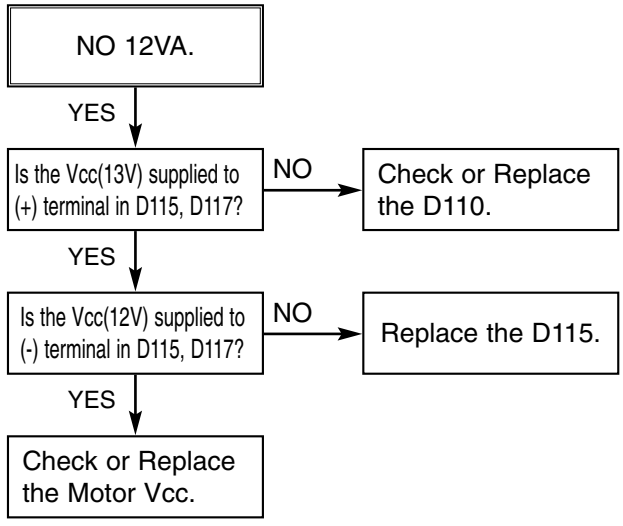
ELECTRICAL TROUBLESHOOTING GUIDE

1. Power(SMPS) CIRCUIT

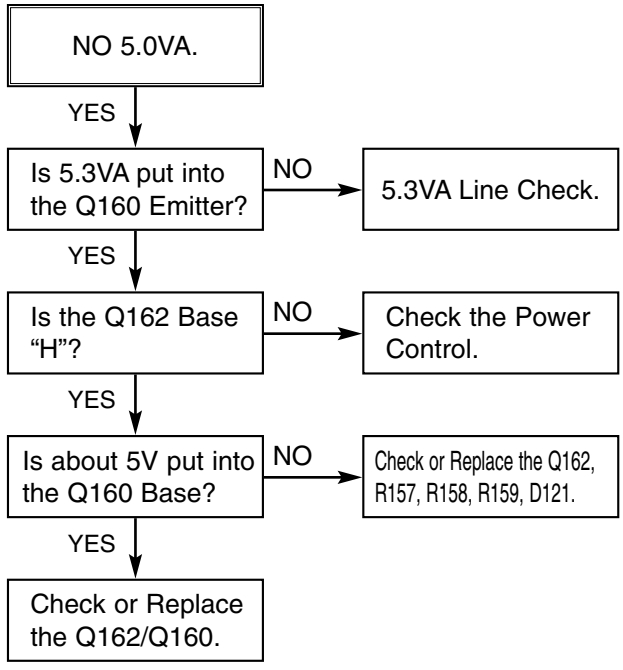
(1) No 5.3VA (SYS/Hi-Fi/TUNER)



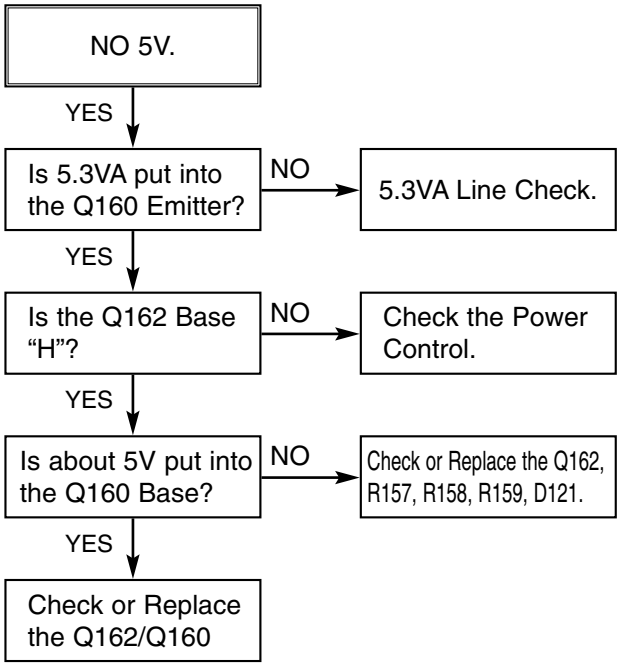
(2) No 12VA (TO CAP, DRUM MOTOR)



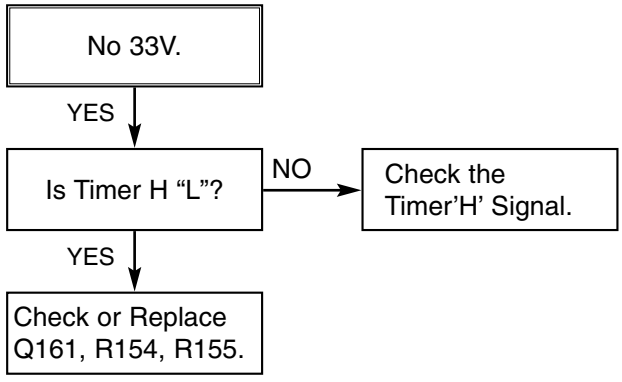
(3) No 5.0V (SYS/Hi-Fi/TUNER)



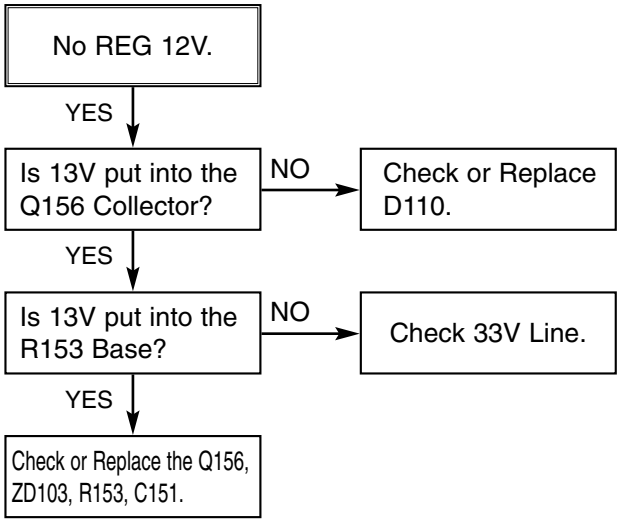
(4) No 5V (TO DVD)



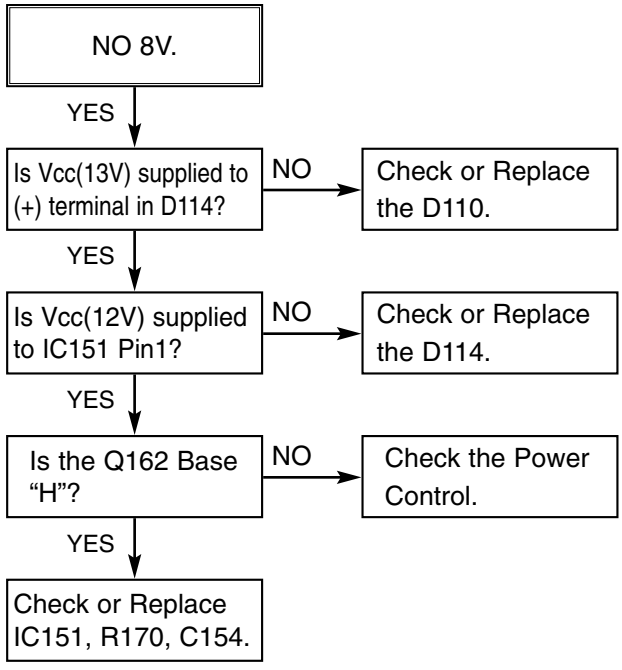
(5) No 33V (TUNER)



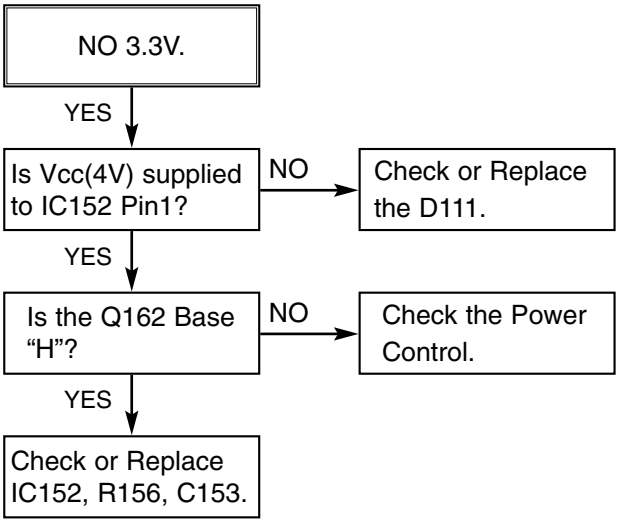
(6) No REG 12V



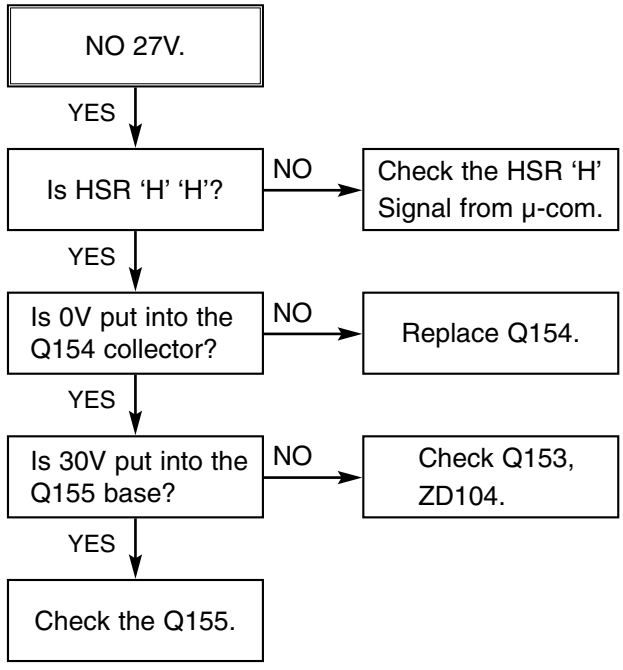
(7) No 8V(TO DVD)



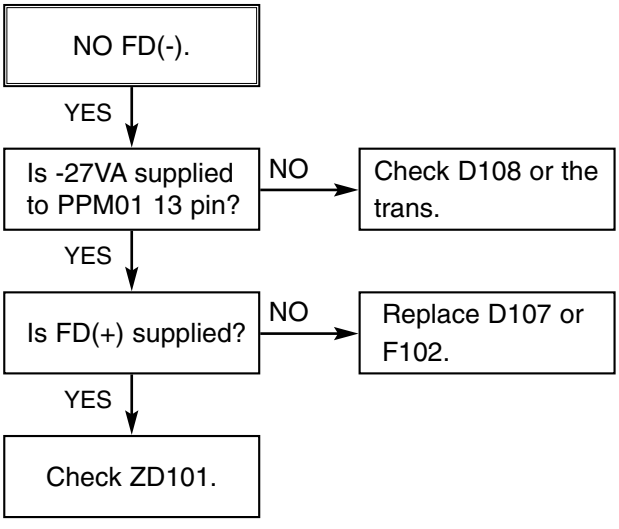
(8) No 3.3V(TO DVD)



(9) No 27V(TO CAP)

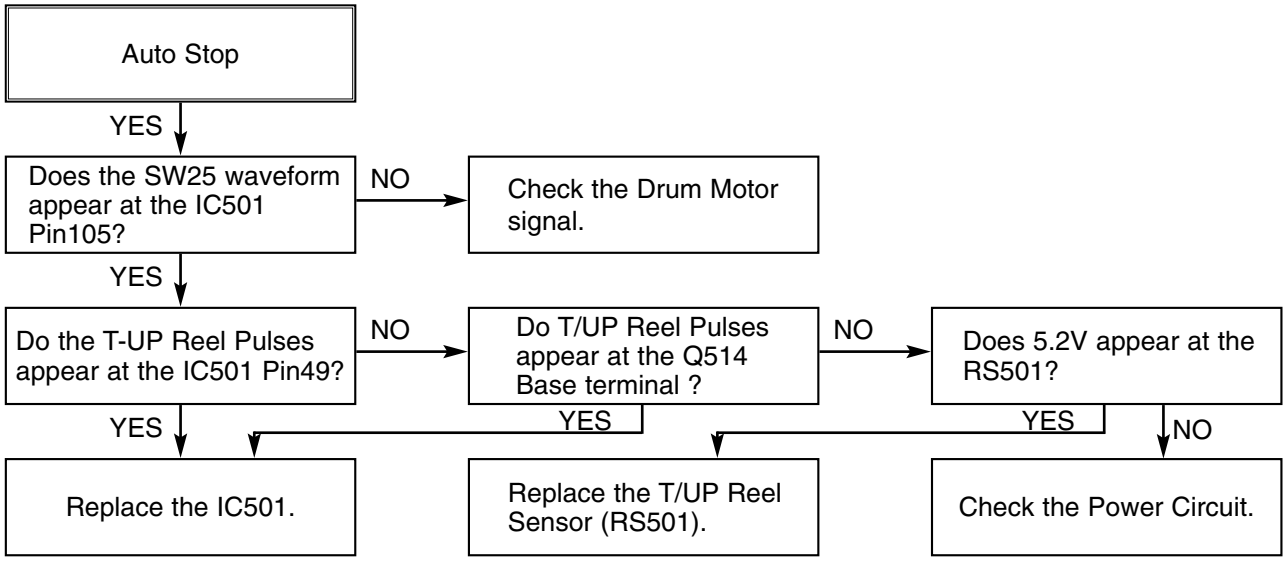


(10) -27VA, FD(-), FD(+)

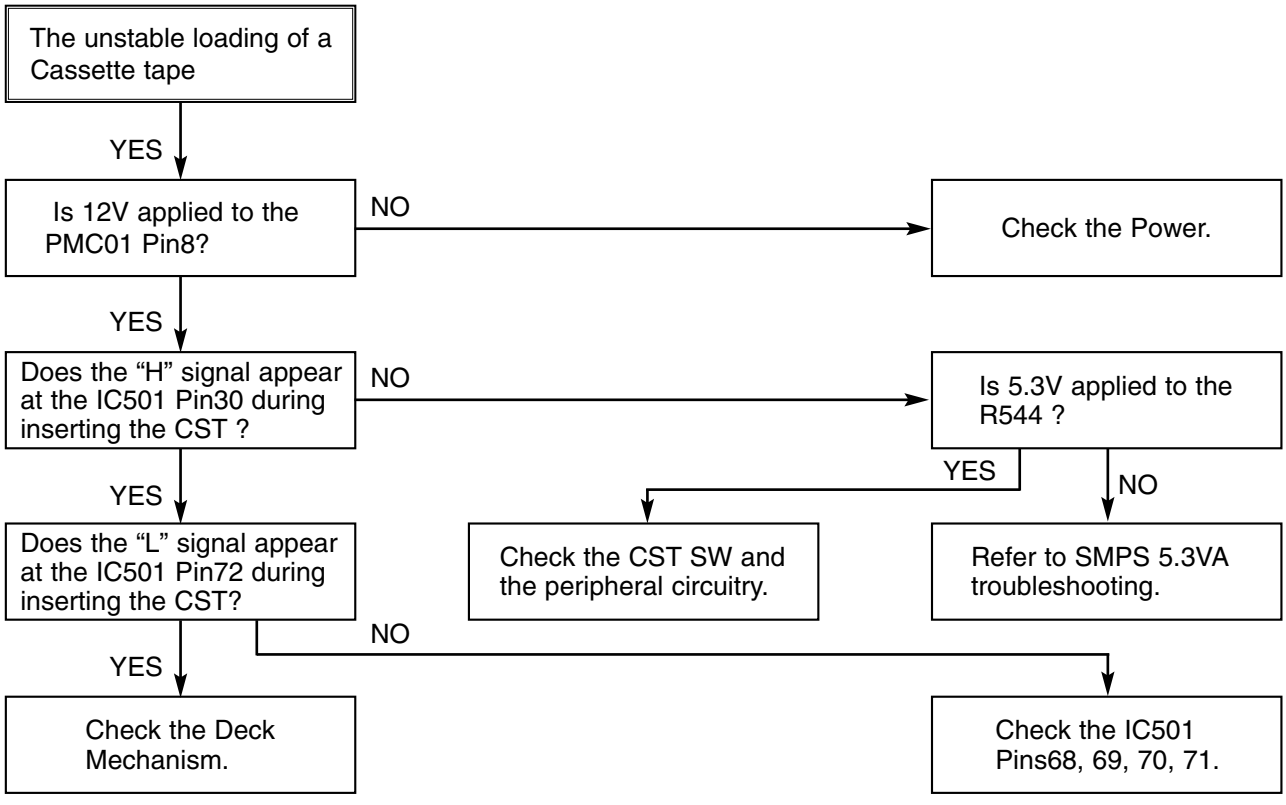


2. SYSTEM/KEY CIRCUIT

(1) AUTO STOP



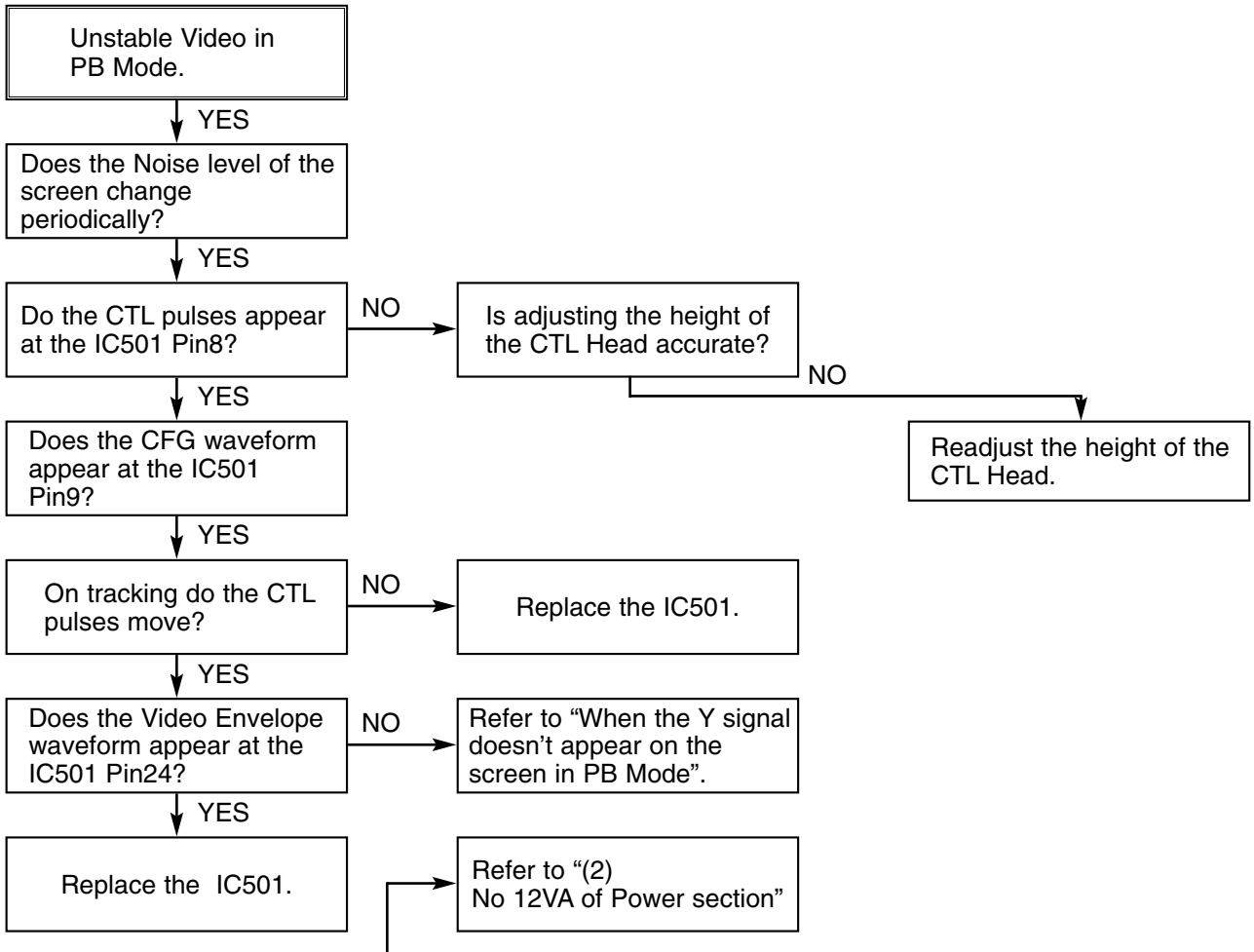
(2) The unstable loading of a Cassette tape


The unstable loading of a Cassette tape
YES
Is 12V applied to the PMC01 Pin8?
NO
Check the Power.
YES
Does the “H” signal appear at the IC501 Pin30 during inserting the CST ?
NO
Is 5.3V applied to the R544 ?
YES
NO
YES
Does the “L” signal appear at the IC501 Pin72 during inserting the CST?
Check the CST SW and the peripheral circuitry.
Refer to SMPS 5.3VA troubleshooting.
NO
YES
Check the Deck Mechanism.
Check the IC501 Pins68, 69, 70, 71.

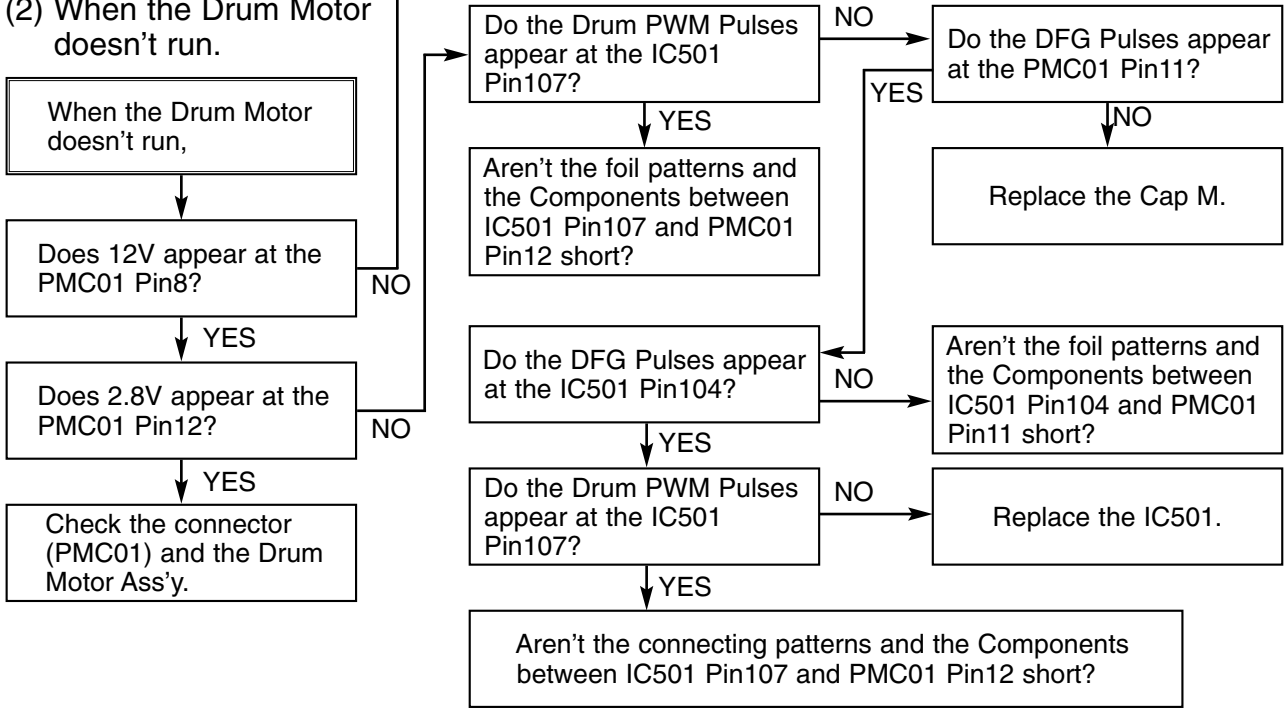
Caution : Auto stop can occur because Grease or Oil is dried up

3. SERVO CIRCUIT

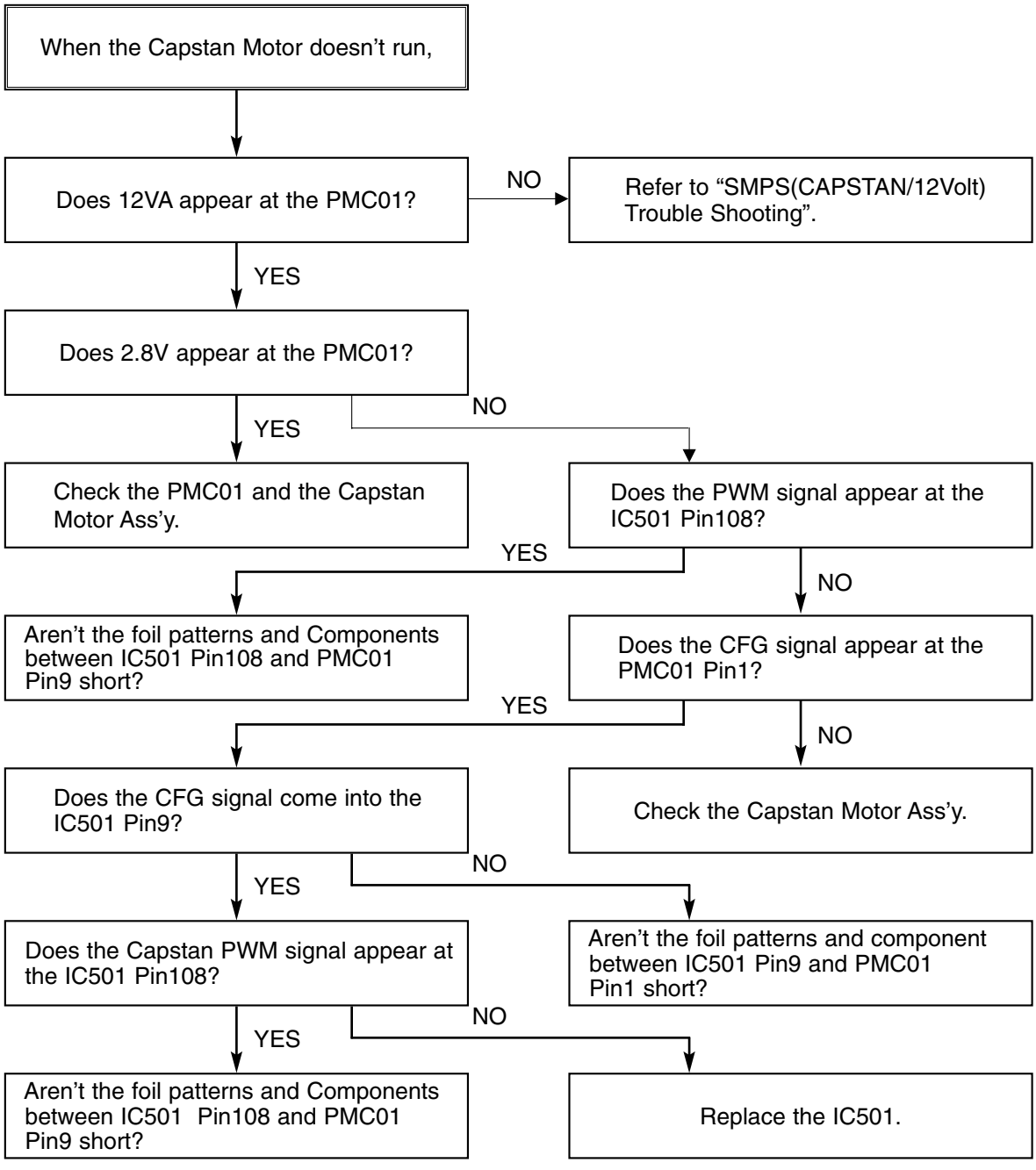
(1) Unstable Video in PB MODE


Unstable Video in PB Mode.
YES
Does the Noise level of the screen change periodically?
YES
Do the CTL pulses appear at the IC501 Pin8?
NO
Is adjusting the height of the CTL Head accurate?
NO
Readjust the height of the CTL Head.
YES
Does the CFG waveform appear at the IC501 Pin9?
YES
On tracking do the CTL pulses move?
NO
Replace the IC501.
YES
Does the Video Envelope waveform appear at the IC501 Pin24?
NO
Refer to "When the Y signal doesn't appear on the screen in PB Mode".
YES
Replace the IC501.

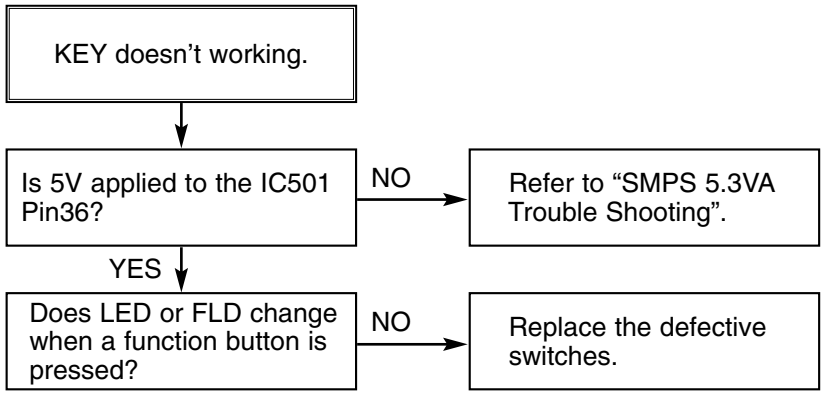
(2) When the Drum Motor doesn't run.


When the Drum Motor doesn't run,
Does 12V appear at the PMC01 Pin8?
NO
Refer to "(2) No 12VA of Power section"
YES
Does 2.8V appear at the PMC01 Pin12?
NO
Do the Drum PWM Pulses appear at the IC501 Pin107?
NO
Do the DFG Pulses appear at the PMC01 Pin11?
YES
NO
Replace the Cap M.
YES
Aren't the foil patterns and the Components between IC501 Pin107 and PMC01 Pin12 short?
YES
Check the connector (PMC01) and the Drum Motor Ass'y.
Do the DFG Pulses appear at the IC501 Pin104?
NO
Aren't the foil patterns and the Components between IC501 Pin104 and PMC01 Pin11 short?
YES
Do the Drum PWM Pulses appear at the IC501 Pin107?
NO
Replace the IC501.
YES
Aren't the connecting patterns and the Components between IC501 Pin107 and PMC01 Pin12 short?

(3) When the Capstan Motor doesn't run,

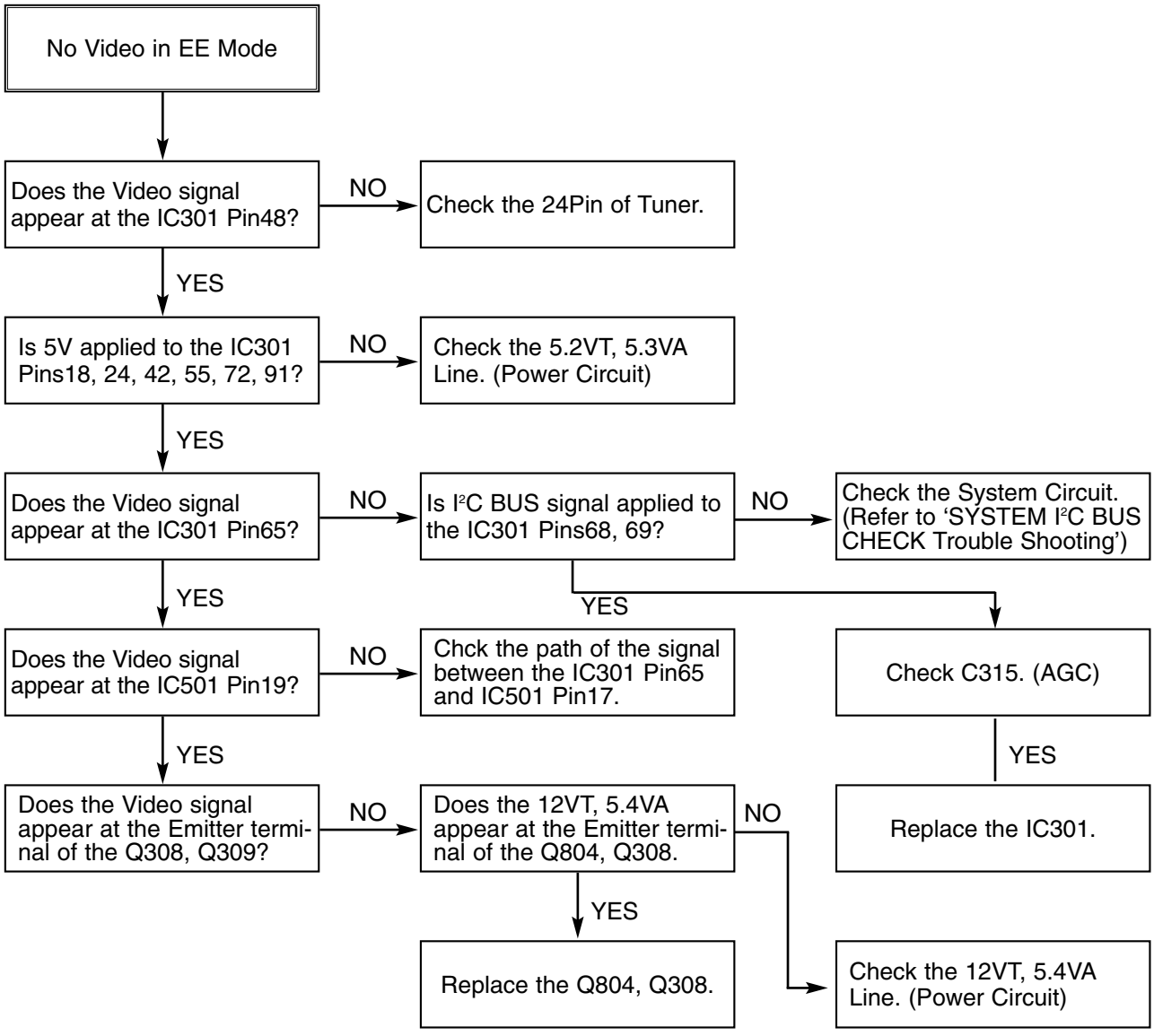

When the Capstan Motor doesn't run,
Does 12VA appear at the PMC01?
NO
Refer to "SMPS(CAPSTAN/12Volt) Trouble Shooting".
YES
Does 2.8V appear at the PMC01?
NO
YES
Check the PMC01 and the Capstan Motor Ass'y.
Does the PWM signal appear at the IC501 Pin108?
YES
NO
Aren't the foil patterns and Components between IC501 Pin108 and PMC01 Pin9 short?
Does the CFG signal appear at the PMC01 Pin1?
YES
NO
Does the CFG signal come into the IC501 Pin9?
Check the Capstan Motor Ass'y.
NO
YES
Does the Capstan PWM signal appear at the IC501 Pin108?
Aren't the foil patterns and component between IC501 Pin9 and PMC01 Pin1 short?
NO
YES
Aren't the foil patterns and Components between IC501 Pin108 and PMC01 Pin9 short?
Replace the IC501.

(4) KEY doesn't working

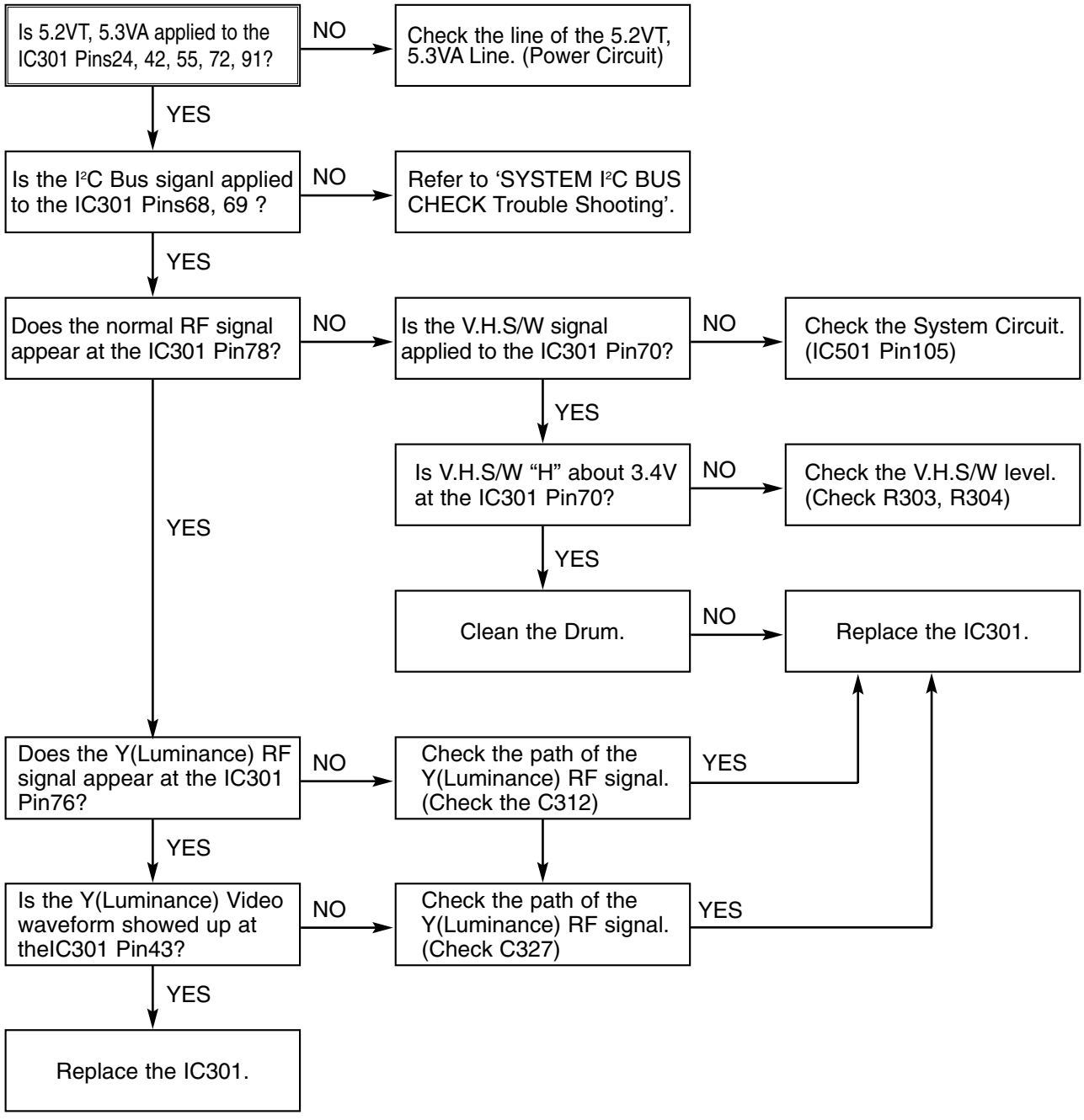

KEY doesn't working.
Is 5V applied to the IC501 Pin36?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does LED or FLD change when a function button is pressed?
NO
Replace the defective switches.

4. Y/C CIRCUIT

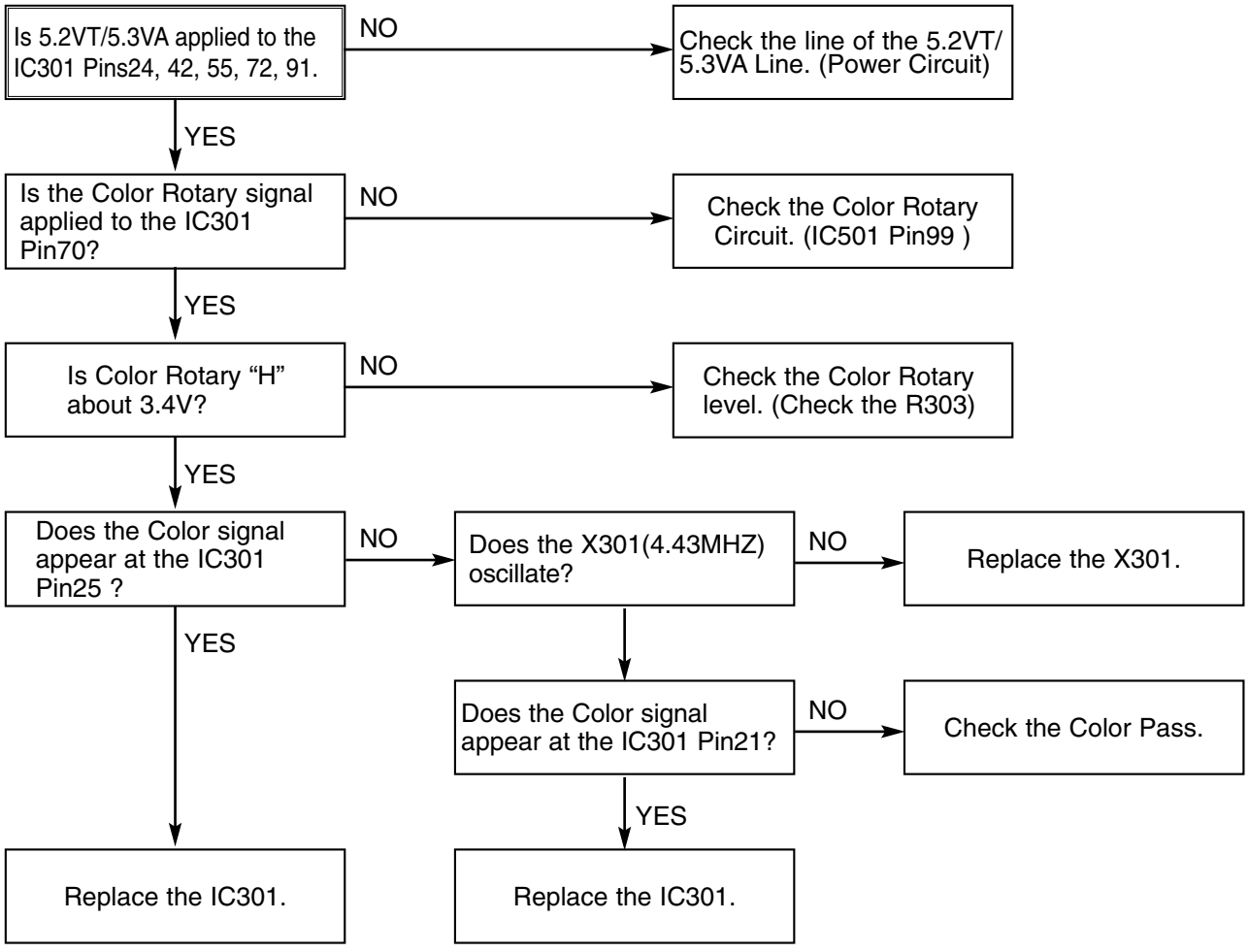
(1) No Video in EE Mode,


No Video in EE Mode
Does the Video signal appear at the IC301 Pin48?
NO
Check the 24Pin of Tuner.
YES
Is 5V applied to the IC301 Pins18, 24, 42, 55, 72, 91?
NO
Check the 5.2VT, 5.3VA Line. (Power Circuit)
YES
Does the Video signal appear at the IC301 Pin65?
NO
Is I²C BUS signal applied to the IC301 Pins68, 69?
NO
Check the System Circuit. (Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting')
YES
YES
Does the Video signal appear at the IC501 Pin19?
NO
Chck the path of the signal between the IC301 Pin65 and IC501 Pin17.
Check C315. (AGC)
YES
YES
Does the Video signal appear at the Emitter terminal of the Q308, Q309?
NO
Does the 12VT, 5.4VA appear at the Emitter terminal of the Q804, Q308.
NO
Replace the IC301.
YES
Replace the Q804, Q308.
Check the 12VT, 5.4VA Line. (Power Circuit)

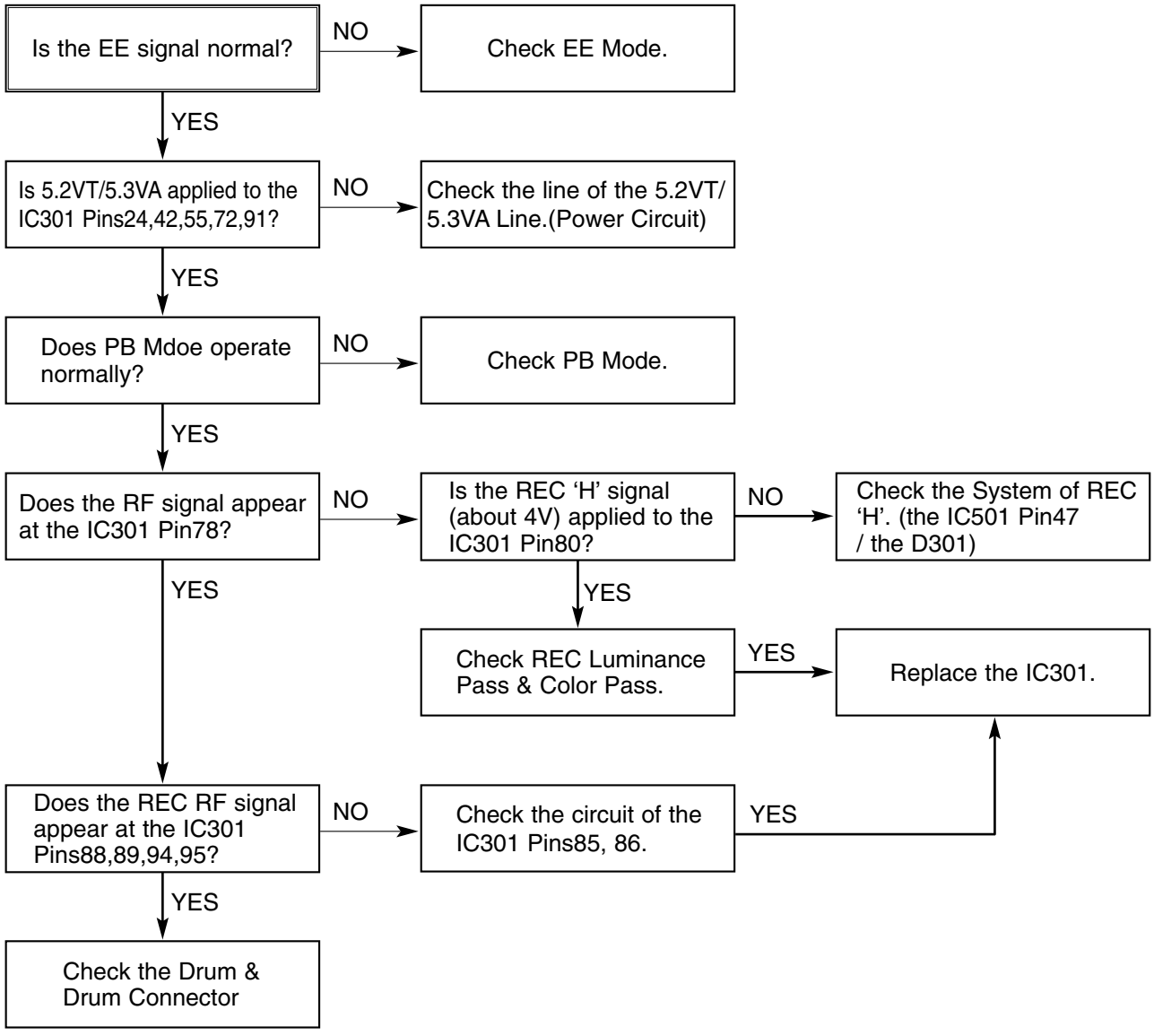
(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,


Is 5.2VT, 5.3VA applied to the IC301 Pins24, 42, 55, 72, 91?
NO
Check the line of the 5.2VT, 5.3VA Line. (Power Circuit)
YES
Is the I²C Bus siganl applied to the IC301 Pins68, 69 ?
NO
Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting'.
YES
Does the normal RF signal appear at the IC301 Pin78?
NO
Is the V.H.S/W signal applied to the IC301 Pin70?
NO
Check the System Circuit. (IC501 Pin105)
YES
Is V.H.S/W "H" about 3.4V at the IC301 Pin70?
NO
Check the V.H.S/W level. (Check R303, R304)
YES
Clean the Drum.
NO
Replace the IC301.
YES
Does the Y(Luminance) RF signal appear at the IC301 Pin76?
NO
Check the path of the Y(Luminance) RF signal. (Check the C312)
YES
YES
Is the Y(Luminance) Video waveform showed up at theIC301 Pin43?
NO
Check the path of the Y(Luminance) RF signal. (Check C327)
YES
YES
Replace the IC301.

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,

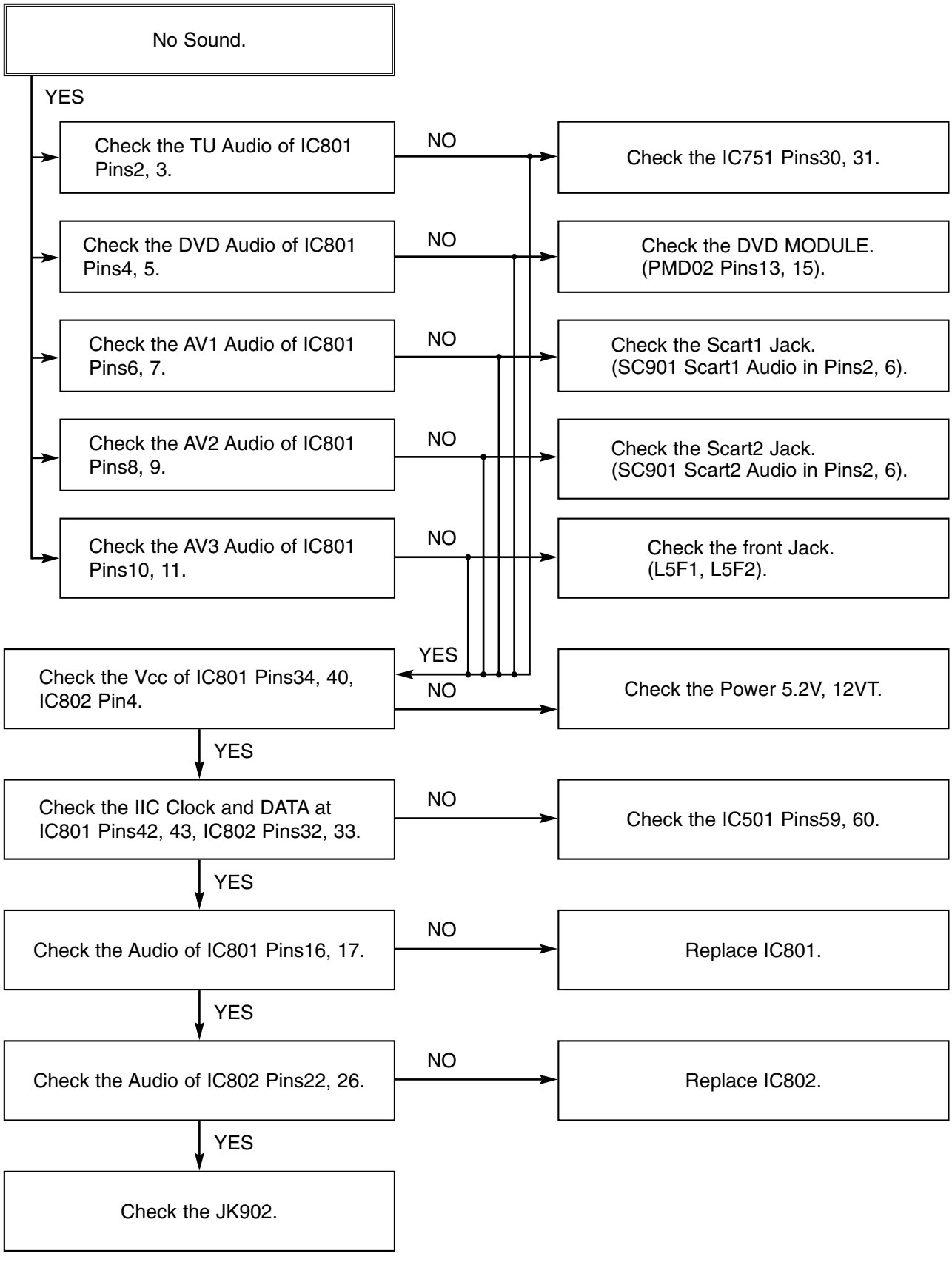

Is 5.2VT/5.3VA applied to the IC301 Pins24, 42, 55, 72, 91.
NO
Check the line of the 5.2VT/ 5.3VA Line. (Power Circuit)
YES
Is the Color Rotary signal applied to the IC301 Pin70?
NO
Check the Color Rotary Circuit. (IC501 Pin99)
YES
Is Color Rotary "H" about 3.4V?
NO
Check the Color Rotary level. (Check the R303)
YES
Does the Color signal appear at the IC301 Pin25 ?
NO
Does the X301(4.43MHZ) oscillate?
NO
Replace the X301.
YES
Does the Color signal appear at the IC301 Pin21?
NO
Check the Color Pass.
YES
Replace the IC301.
Replace the IC301.

(4) When the Video signal doesn't appear on the screen in REC Mode,

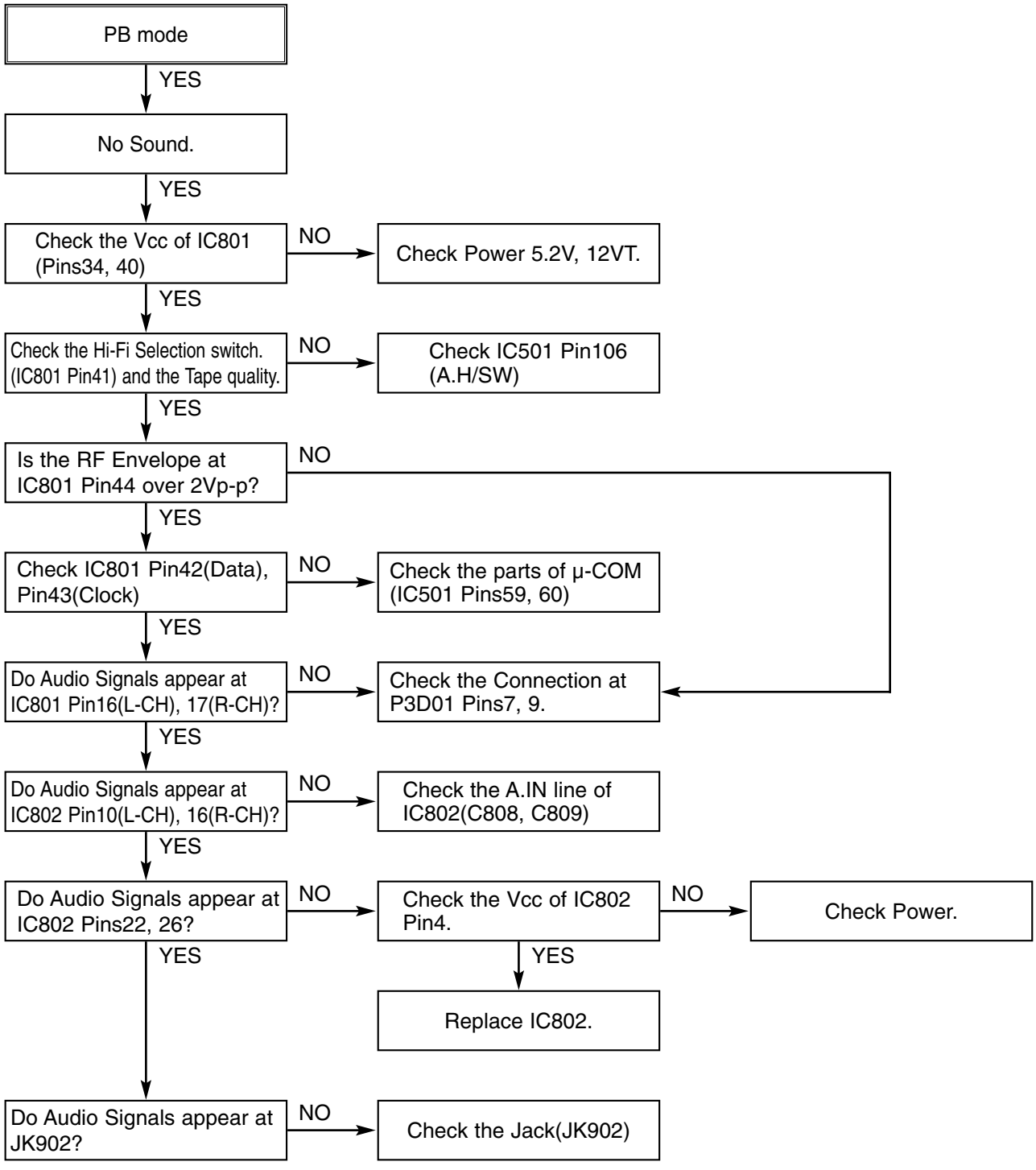

Is the EE signal normal?
NO
Check EE Mode.
YES
Is 5.2VT/5.3VA applied to the IC301 Pins24,42,55,72,91?
NO
Check the line of the 5.2VT/ 5.3VA Line.(Power Circuit)
YES
Does PB Mdoe operate normally?
NO
Check PB Mode.
YES
Does the RF signal appear at the IC301 Pin78?
NO
Is the REC 'H' signal (about 4V) applied to the IC301 Pin80?
NO
Check the System of REC 'H'. (the IC501 Pin47 / the D301)
YES
YES
Check REC Luminance Pass & Color Pass.
YES
Replace the IC301.
Does the REC RF signal appear at the IC301 Pins88,89,94,95?
NO
Check the circuit of the IC301 Pins85, 86.
YES
YES
Check the Drum & Drum Connector

5. Hi-Fi CIRCUIT

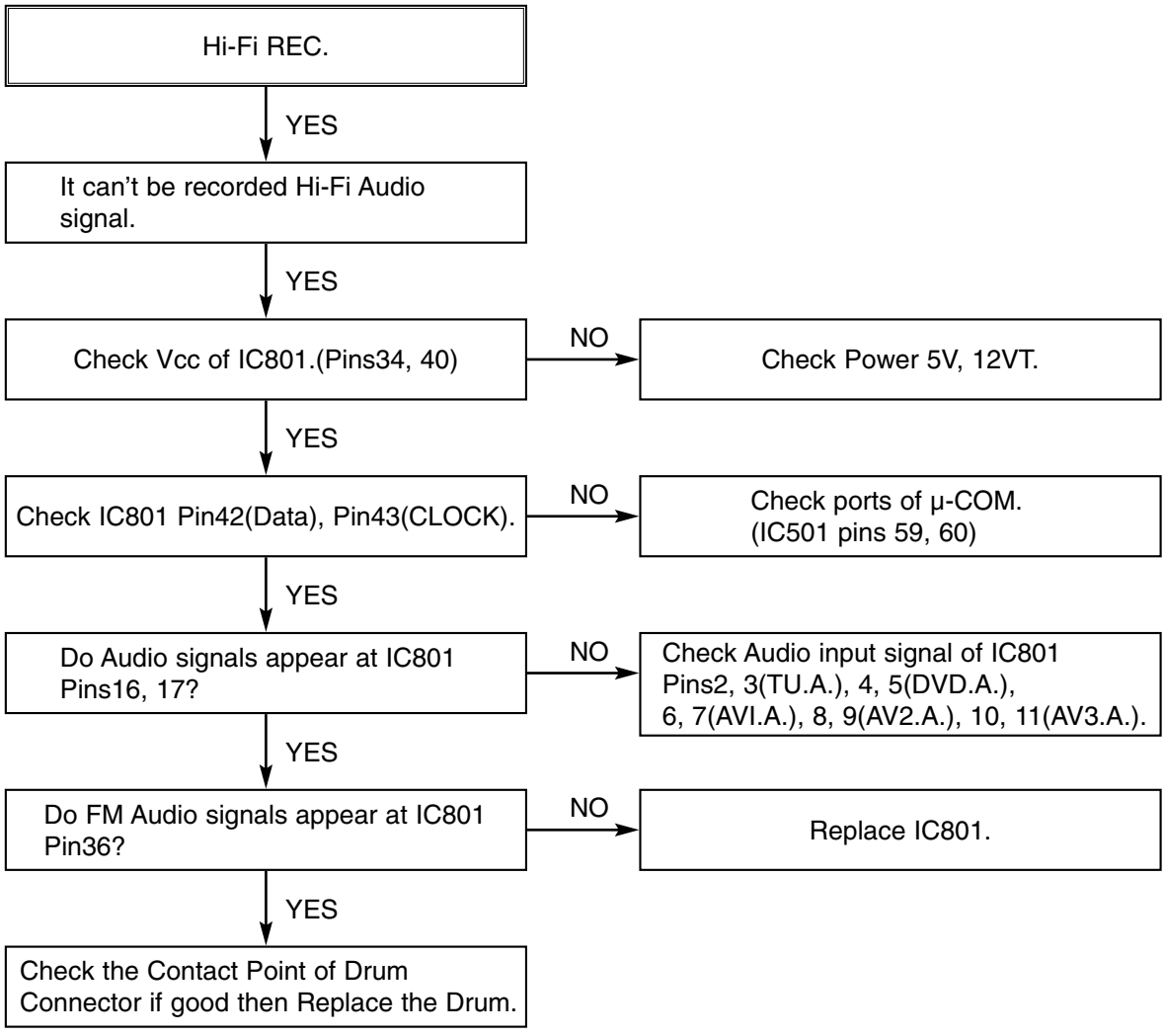
(A) No Sound(EE Mode)


No Sound.
YES
Check the TU Audio of IC801 Pins2, 3.
NO
Check the IC751 Pins30, 31.
Check the DVD Audio of IC801 Pins4, 5.
NO
Check the DVD MODULE. (PMD02 Pins13, 15).
Check the AV1 Audio of IC801 Pins6, 7.
NO
Check the Scart1 Jack. (SC901 Scart1 Audio in Pins2, 6).
Check the AV2 Audio of IC801 Pins8, 9.
NO
Check the Scart2 Jack. (SC901 Scart2 Audio in Pins2, 6).
Check the AV3 Audio of IC801 Pins10, 11.
NO
Check the front Jack. (L5F1, L5F2).
YES
Check the Vcc of IC801 Pins34, 40, IC802 Pin4.
NO
Check the Power 5.2V, 12VT.
YES
Check the IIC Clock and DATA at IC801 Pins42, 43, IC802 Pins32, 33.
NO
Check the IC501 Pins59, 60.
YES
Check the Audio of IC801 Pins16, 17.
NO
Replace IC801.
YES
Check the Audio of IC802 Pins22, 26.
NO
Replace IC802.
YES
Check the JK902.

(B) Hi-Fi Playback

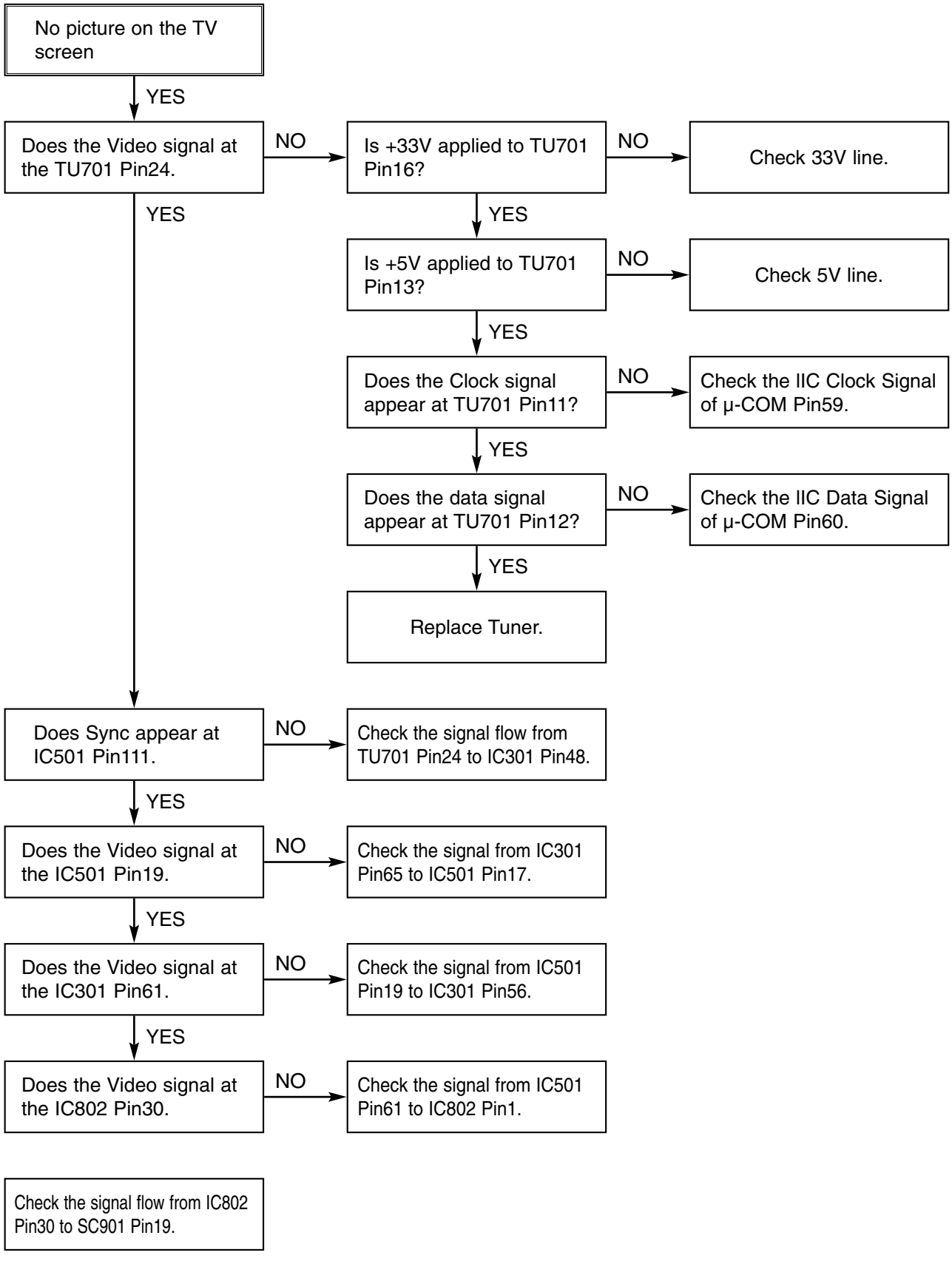


(C)

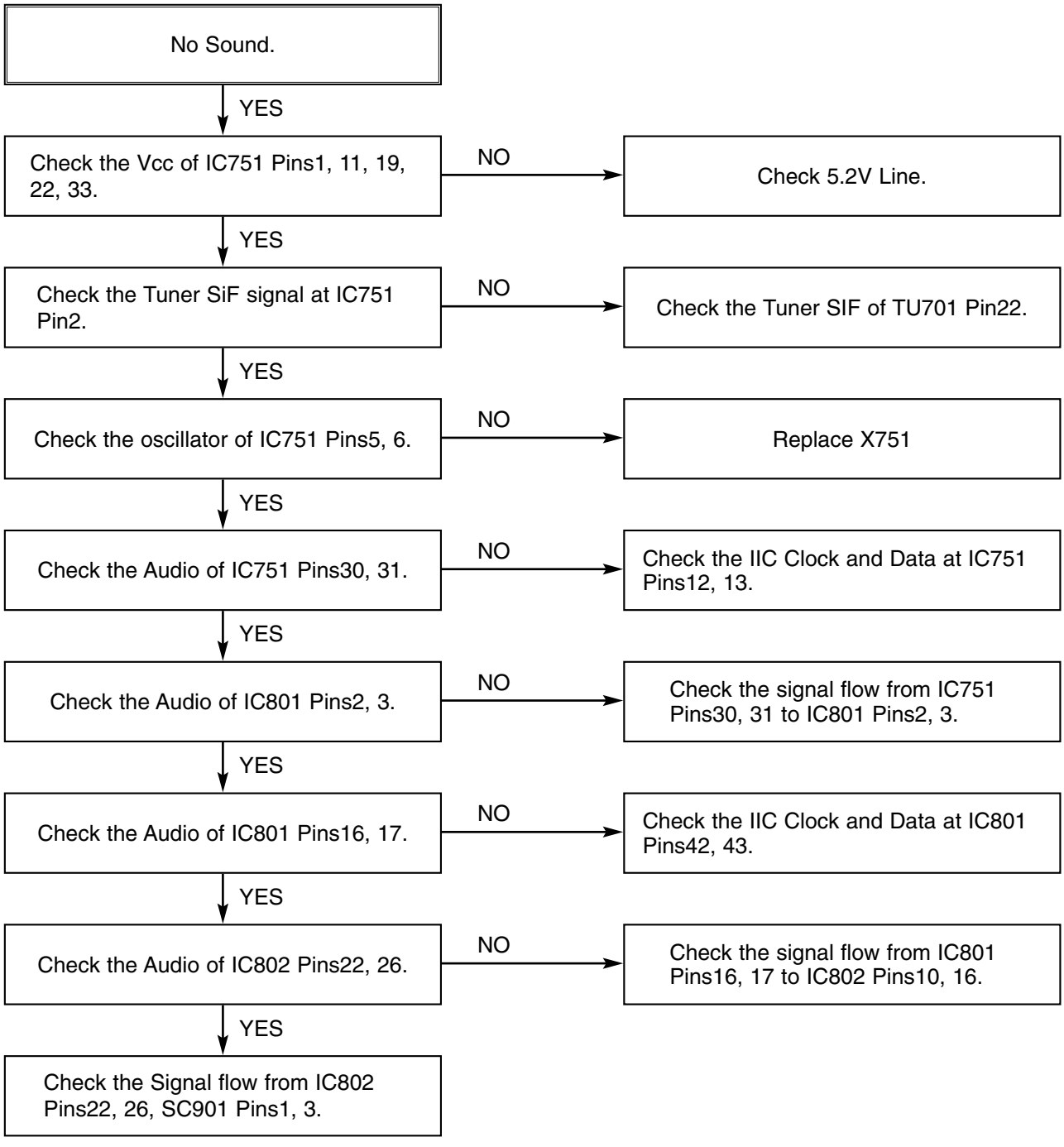

Hi-Fi REC.
YES
It can't be recorded Hi-Fi Audio signal.
YES
Check Vcc of IC801.(Pins34, 40)
NO
Check Power 5V, 12VT.
YES
Check IC801 Pin42(Data), Pin43(CLOCK).
NO
Check ports of µ-COM. (IC501 pins 59, 60)
YES
Do Audio signals appear at IC801 Pins16, 17?
NO
Check Audio input signal of IC801 Pins2, 3(TU.A.), 4, 5(DVD.A.), 6, 7(AVI.A.), 8, 9(AV2.A.), 10, 11(AV3.A.).
YES
Do FM Audio signals appear at IC801 Pin36?
NO
Replace IC801.
YES
Check the Contact Point of Drum Connector if good then Replace the Drum.

6. Tuner/IF CIRCUIT

(A) No Picture on the TV screen


No picture on the TV screen
YES
Does the Video signal at the TU701 Pin24.
NO
Is +33V applied to TU701 Pin16?
NO
Check 33V line.
YES
YES
Is +5V applied to TU701 Pin13?
NO
Check 5V line.
YES
Does the Clock signal appear at TU701 Pin11?
NO
Check the IIC Clock Signal of µ-COM Pin59.
YES
Does the data signal appear at TU701 Pin12?
NO
Check the IIC Data Signal of µ-COM Pin60.
YES
Replace Tuner.
Does Sync appear at IC501 Pin111.
NO
Check the signal flow from TU701 Pin24 to IC301 Pin48.
YES
Does the Video signal at the IC501 Pin19.
NO
Check the signal from IC301 Pin65 to IC501 Pin17.
YES
Does the Video signal at the IC301 Pin61.
NO
Check the signal from IC501 Pin19 to IC301 Pin56.
YES
Does the Video signal at the IC802 Pin30.
NO
Check the signal from IC501 Pin61 to IC802 Pin1.
Check the signal flow from IC802 Pin30 to SC901 Pin19.

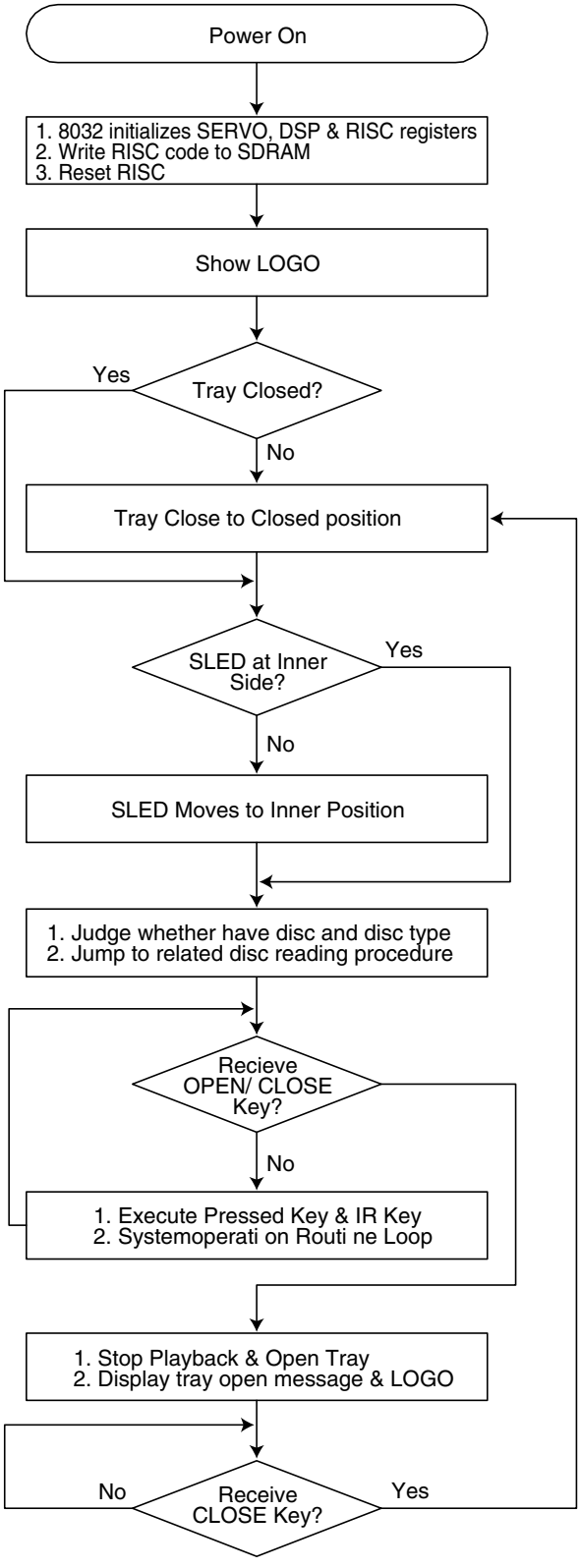
(B) No Sound


No Sound.
YES
Check the Vcc of IC751 Pins1, 11, 19, 22, 33.
NO
Check 5.2V Line.
YES
Check the Tuner SiF signal at IC751 Pin2.
NO
Check the Tuner SIF of TU701 Pin22.
YES
Check the oscillator of IC751 Pins5, 6.
NO
Replace X751
YES
Check the Audio of IC751 Pins30, 31.
NO
Check the IIC Clock and Data at IC751 Pins12, 13.
YES
Check the Audio of IC801 Pins2, 3.
NO
Check the signal flow from IC751 Pins30, 31 to IC801 Pins2, 3.
YES
Check the Audio of IC801 Pins16, 17.
NO
Check the IIC Clock and Data at IC801 Pins42, 43.
YES
Check the Audio of IC802 Pins22, 26.
NO
Check the signal flow from IC801 Pins16, 17 to IC802 Pins10, 16.
YES
Check the Signal flow from IC802 Pins22, 26, SC901 Pins1, 3.

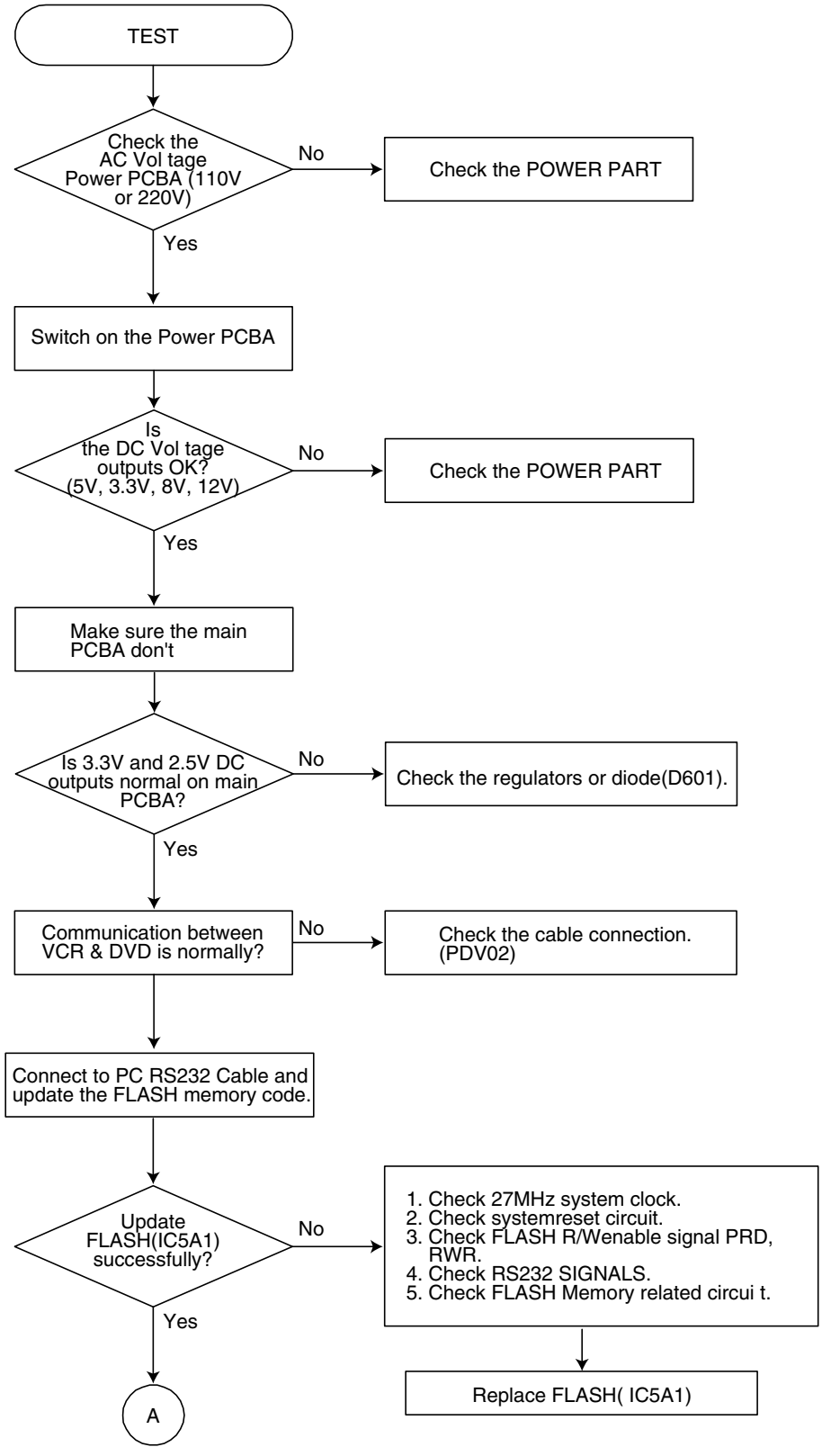
MEMO

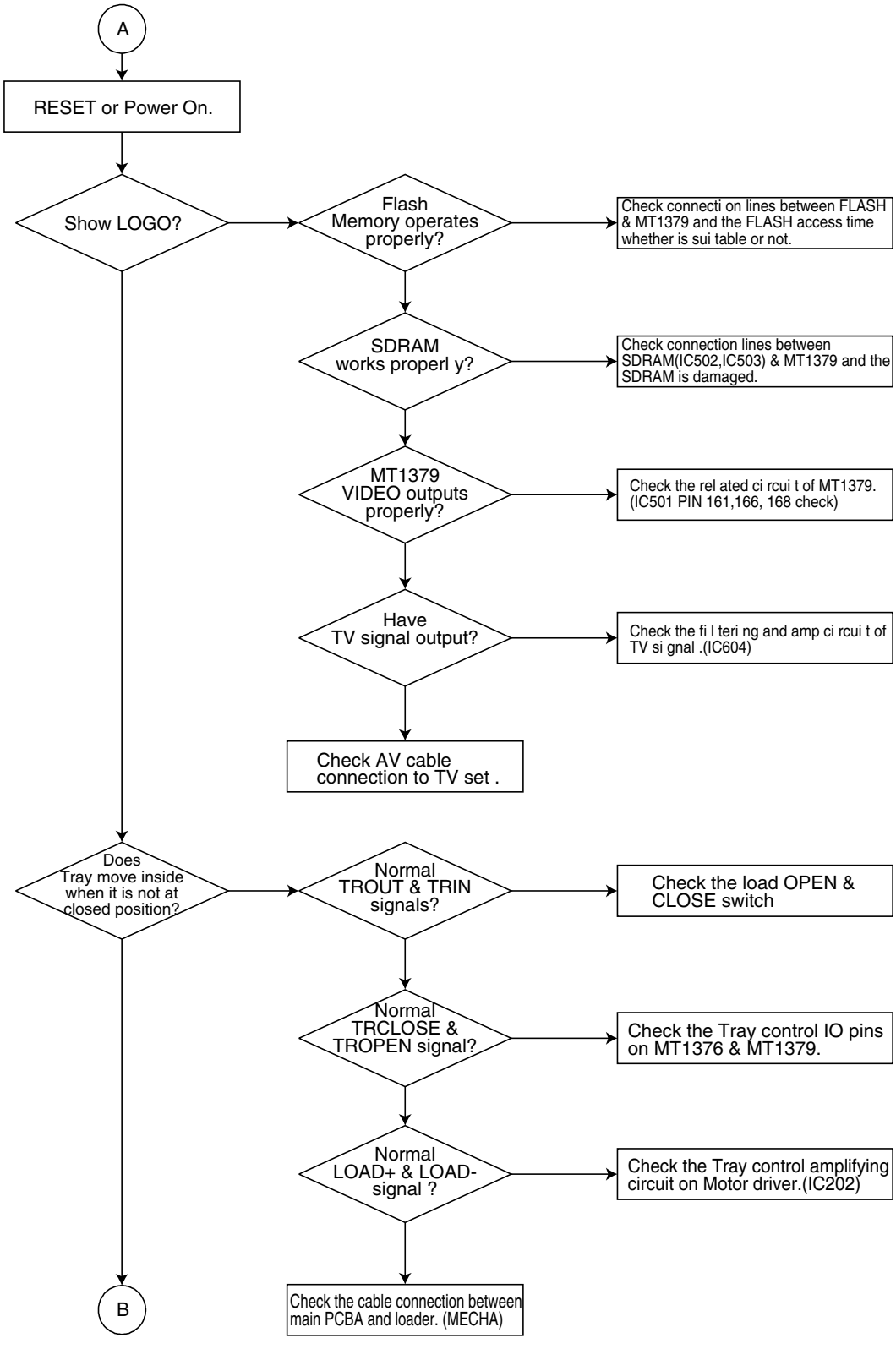
DVD PART
ELECTRICAL TROUBLESHOOTING GUIDE

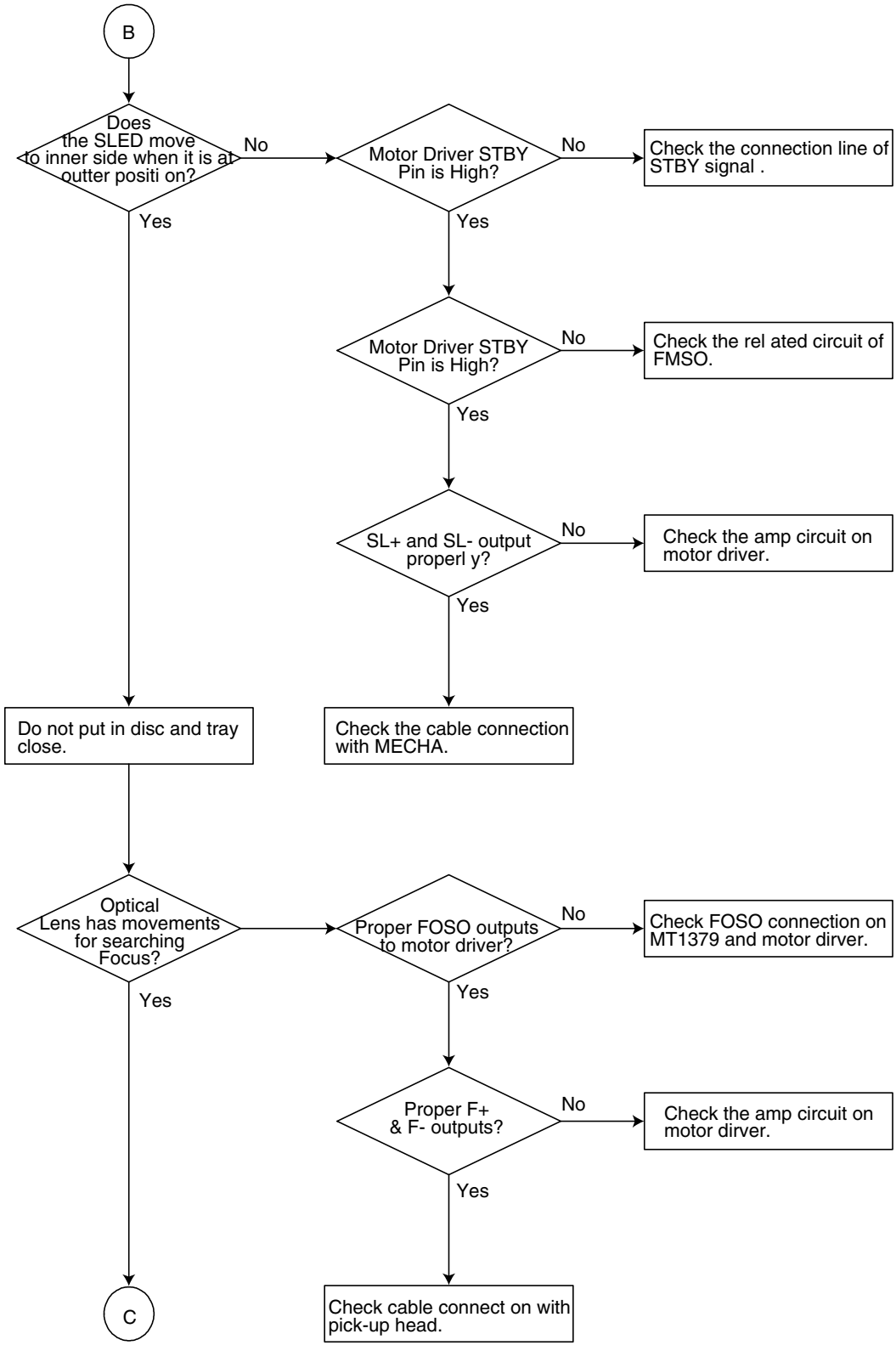
1. System operation flow

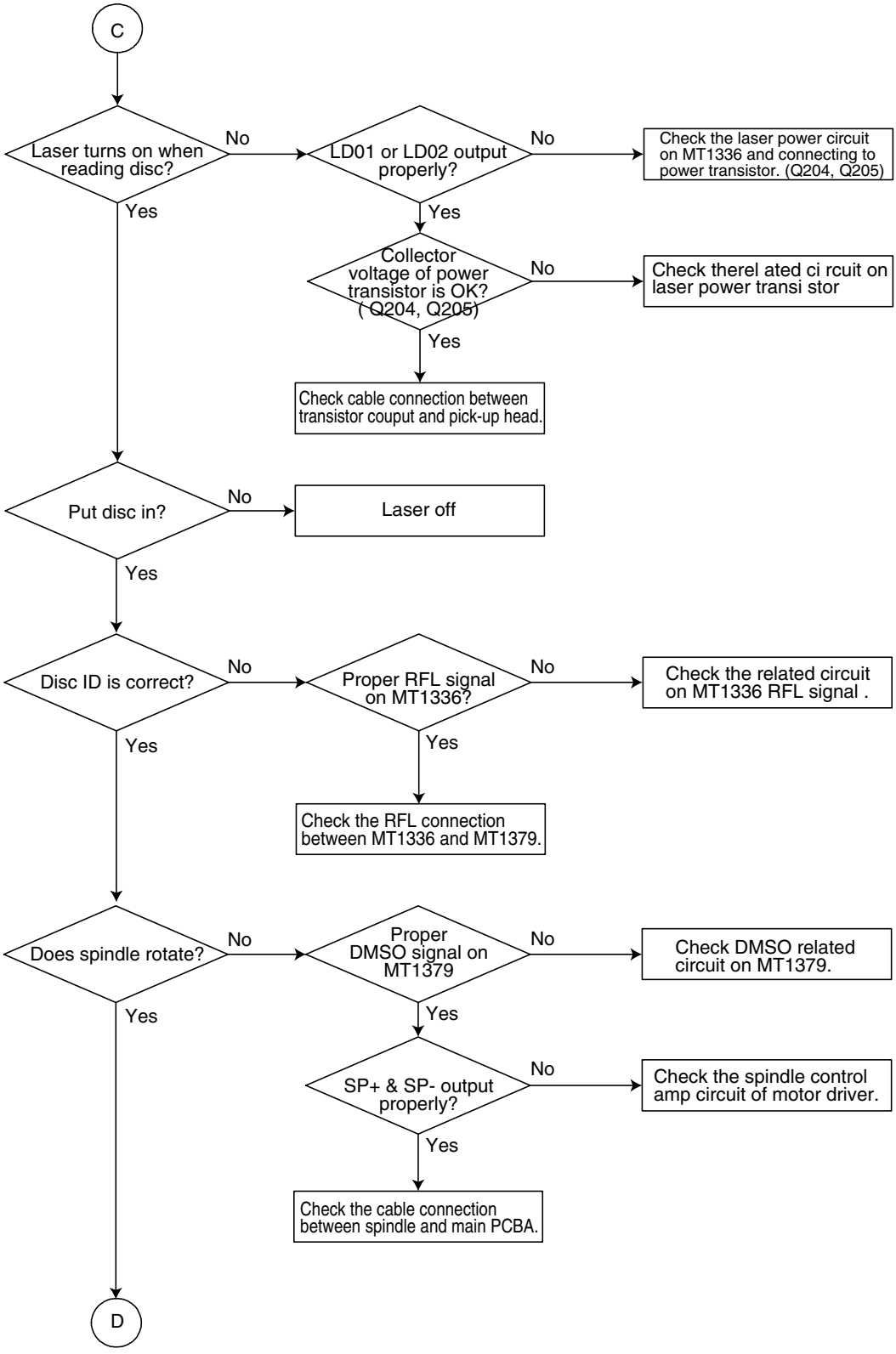


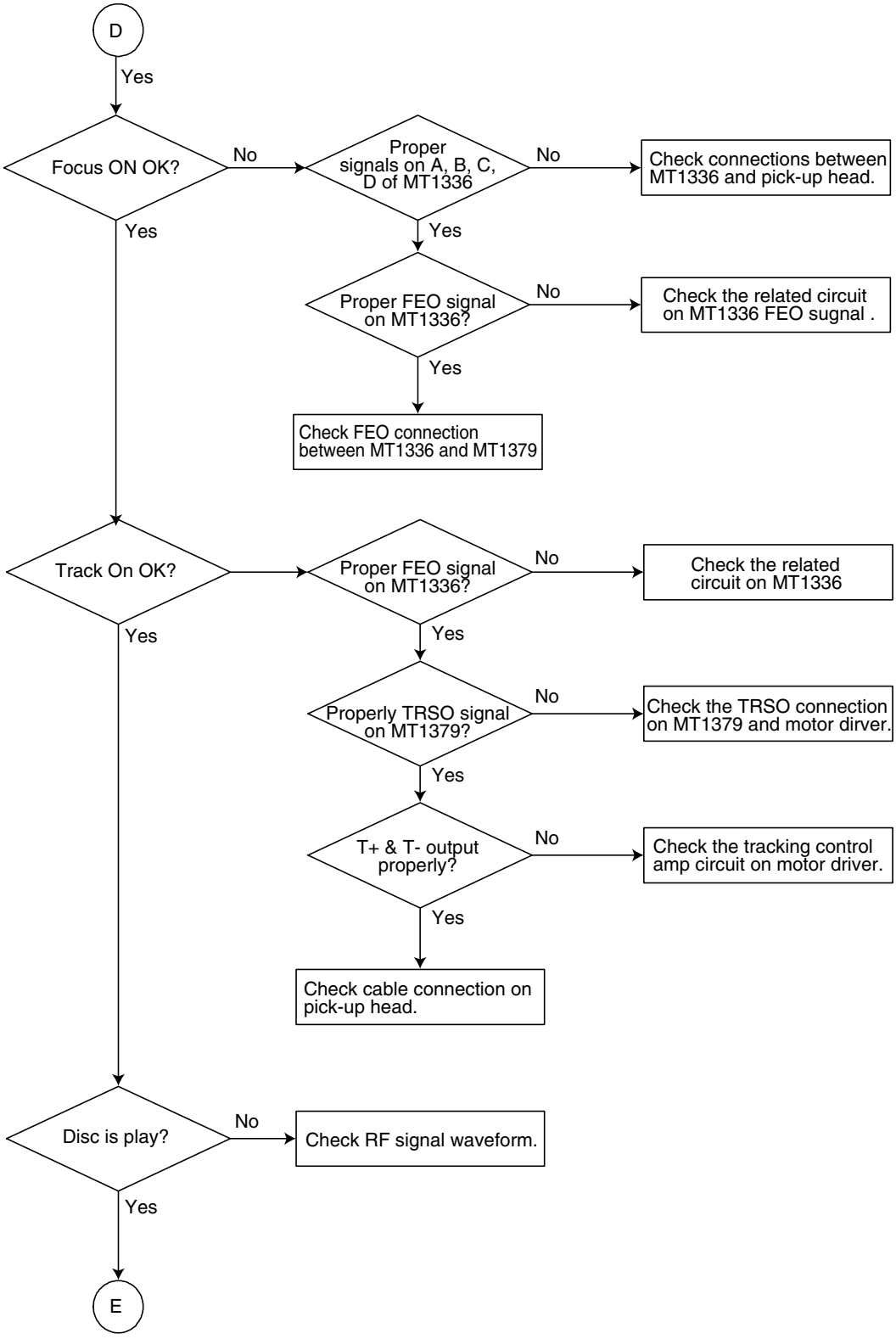
2. Test & debug flow

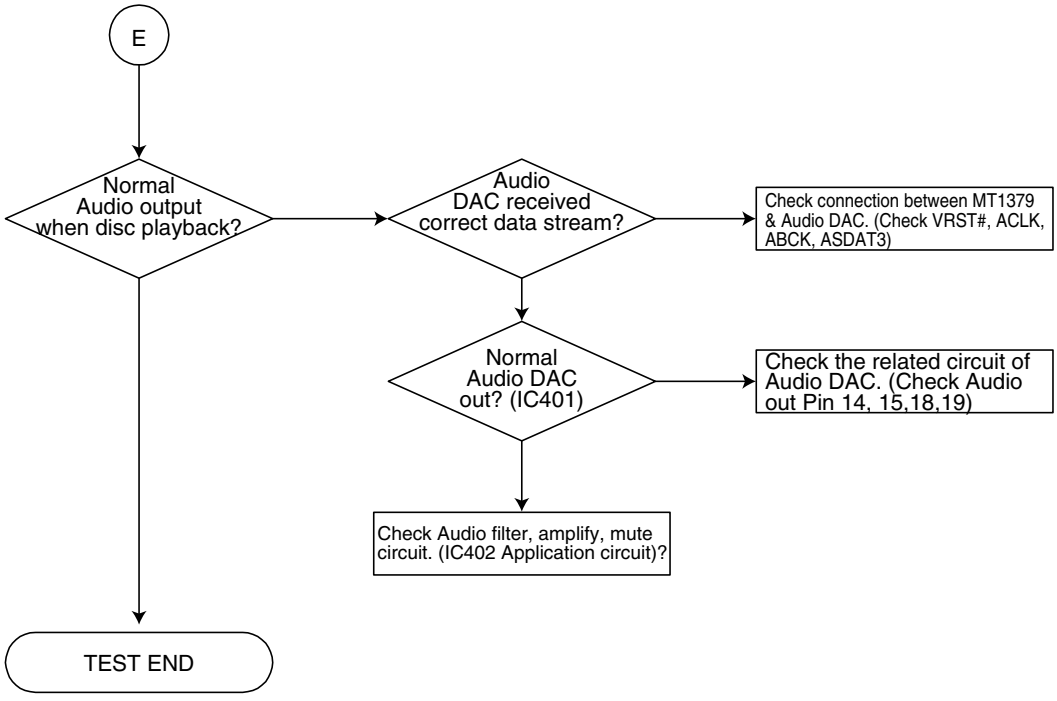

TEST
Check the AC Vol tage Power PCBA (110V or 220V)
No
Check the POWER PART
Yes
Switch on the Power PCBA
Is the DC Vol tage outputs OK? (5V, 3.3V, 8V, 12V)
No
Check the POWER PART
Yes
Make sure the main PCBA don't
Is 3.3V and 2.5V DC outputs normal on main PCBA?
No
Check the regulators or diode(D601).
Yes
Communication between VCR & DVD is normally?
No
Check the cable connection. (PDV02)
Connect to PC RS232 Cable and update the FLASH memory code.
Update FLASH(IC5A1) successfully?
No
1. Check 27MHz system clock.
2. Check systemreset circuit.
3. Check FLASH R/Wenable signal PRD, RWR.
4. Check RS232 SIGNALS.
5. Check FLASH Memory related circui t.
Replace FLASH(IC5A1)
Yes
A


A
RESET or Power On.
Show LOGO?
Flash Memory operates properly?
Check connecti on lines between FLASH & MT1379 and the FLASH access time whether is sui table or not.
SDRAM works properl y?
Check connection lines between SDRAM(IC502,IC503) & MT1379 and the SDRAM is damaged.
MT1379 VIDEO outputs properly?
Check the rel ated ci rcui t of MT1379. (IC501 PIN 161,166, 168 check)
Have TV signal output?
Check the fi l teri ng and amp ci rcui t of TV si gnal .(IC604)
Check AV cable connection to TV set .
Does Tray move inside when it is not at closed position?
Normal TROUT & TRIN signals?
Check the load OPEN & CLOSE switch
Normal TRCLOSE & TROPEN signal?
Check the Tray control IO pins on MT1376 & MT1379.
Normal LOAD+ & LOAD- signal ?
Check the Tray control amplifying circuit on Motor driver.(IC202)
Check the cable connection between main PCBA and loader. (MECHA)
B


B
Does the SLED move to inner side when it is at outter positi on?
No
Yes
Motor Driver STBY Pin is High?
No
Check the connection line of STBY signal .
Yes
Motor Driver STBY Pin is High?
No
Check the rel ated circuit of FMSO.
Yes
SL+ and SL- output properl y?
No
Check the amp circuit on motor driver.
Yes
Do not put in disc and tray close.
Check the cable connection with MECHA.
Optical Lens has movements for searching Focus?
Proper FOSO outputs to motor driver?
No
Check FOSO connection on MT1379 and motor dirver.
Yes
Yes
Proper F+ & F- outputs?
No
Check the amp circuit on motor dirver.
Yes
C
Check cable connect on with pick-up head.


C
Laser turns on when reading disc?
No
LD01 or LD02 output properly?
No
Check the laser power circuit on MT1336 and connecting to power transistor. (Q204, Q205)
Yes
Yes
Collector voltage of power transistor is OK? (Q204, Q205)
No
Check therel ated ci rcuit on laser power transi stor
Yes
Check cable connection between transistor couput and pick-up head.
Put disc in?
No
Laser off
Yes
Disc ID is correct?
No
Proper RFL signal on MT1336?
No
Check the related circuit on MT1336 RFL signal .
Yes
Yes
Check the RFL connection between MT1336 and MT1379.
Does spindle rotate?
No
Proper DMSO signal on MT1379
No
Check DMSO related circuit on MT1379.
Yes
Yes
SP+ & SP- output properly?
No
Check the spindle control amp circuit of motor driver.
Yes
Check the cable connection between spindle and main PCBA.
D


D
Yes
Focus ON OK?
No
Proper signals on A, B, C, D of MT1336
No
Check connections between MT1336 and pick-up head.
Yes
Yes
Proper FEO signal on MT1336?
No
Check the related circuit on MT1336 FEO sugnal .
Yes
Check FEO connection between MT1336 and MT1379
Track On OK?
Proper FEO signal on MT1336?
No
Check the related circuit on MT1336
Yes
Yes
Properly TRSO signal on MT1379?
No
Check the TRSO connection on MT1379 and motor dirver.
Yes
T+ & T- output properly?
No
Check the tracking control amp circuit on motor driver.
Yes
Check cable connection on pick-up head.
Disc is play?
No
Check RF signal waveform.
Yes
E


E
Normal
Audio output
when disc playback?
Audio
DAC received
correct data stream?
Check connection between MT1379
& Audio DAC. (Check VRST#, ACLK,
ABCK, ASDAT3)
Normal
Audio DAC
out? (IC401)
Check the related circuit of
Audio DAC. (Check Audio
out Pin 14, 15,18,19)
Check Audio filter, amplify, mute
circuit. (IC402 Application circuit)?
TEST END

DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING

1. SYSTEM 27MHz CLOCK,RESET,FLASH R/W SIGNAL

1) MT1379 main clock is at 27MHz(X501)

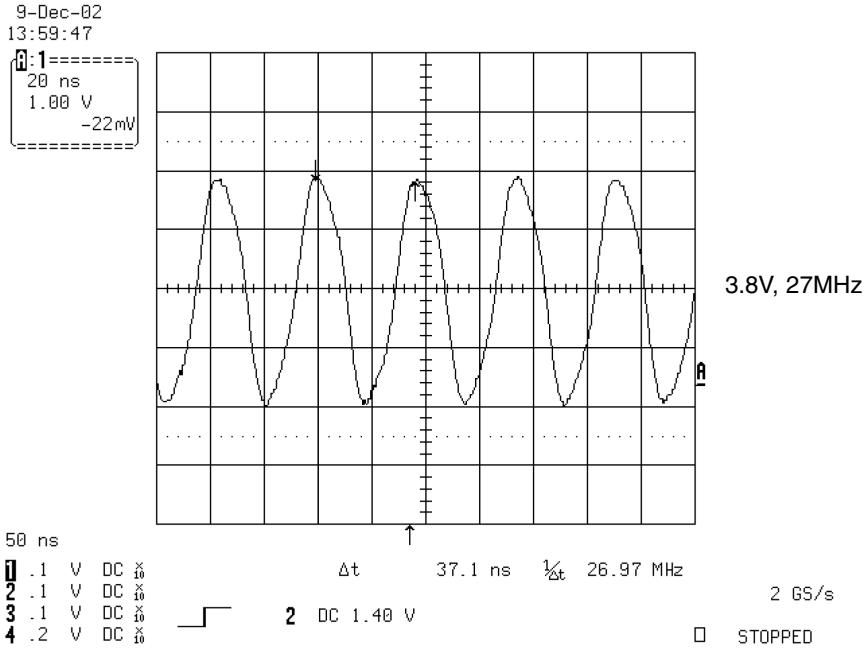


FIG 1-1

2) MT1379 & MT1336 reset is high active.

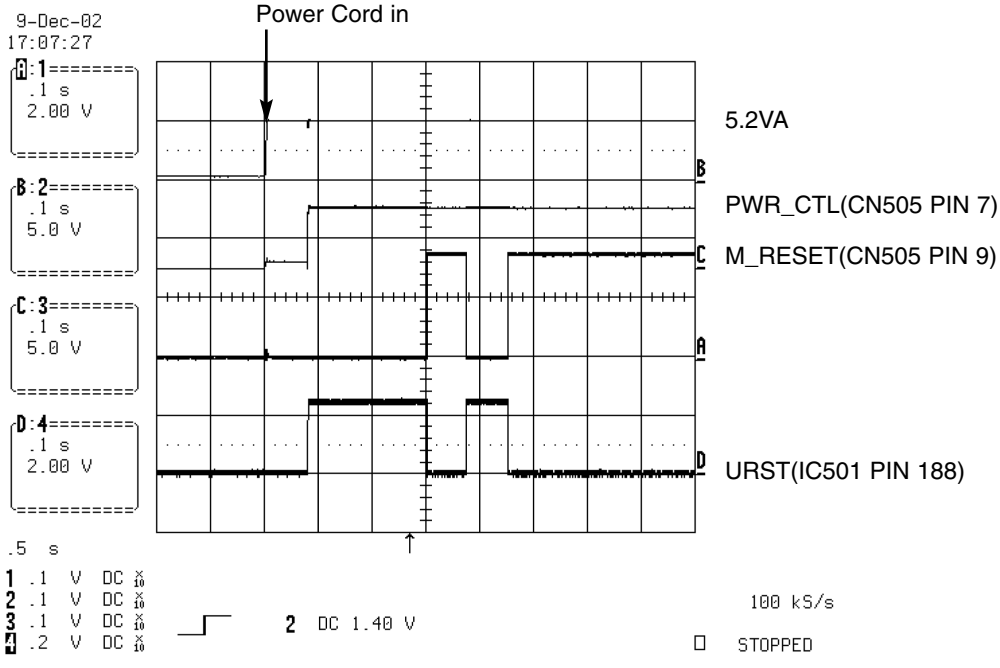


FIG 1-2

3) RS232 waveform during procedure(Downloading)

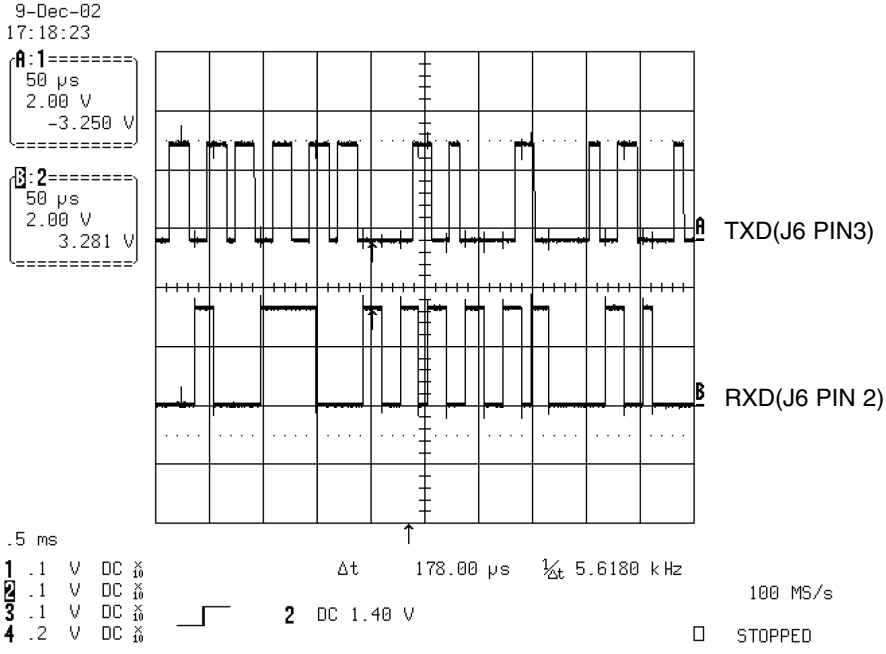


FIG 1-3

4) Flash R/W enable signal during download(Downloading)

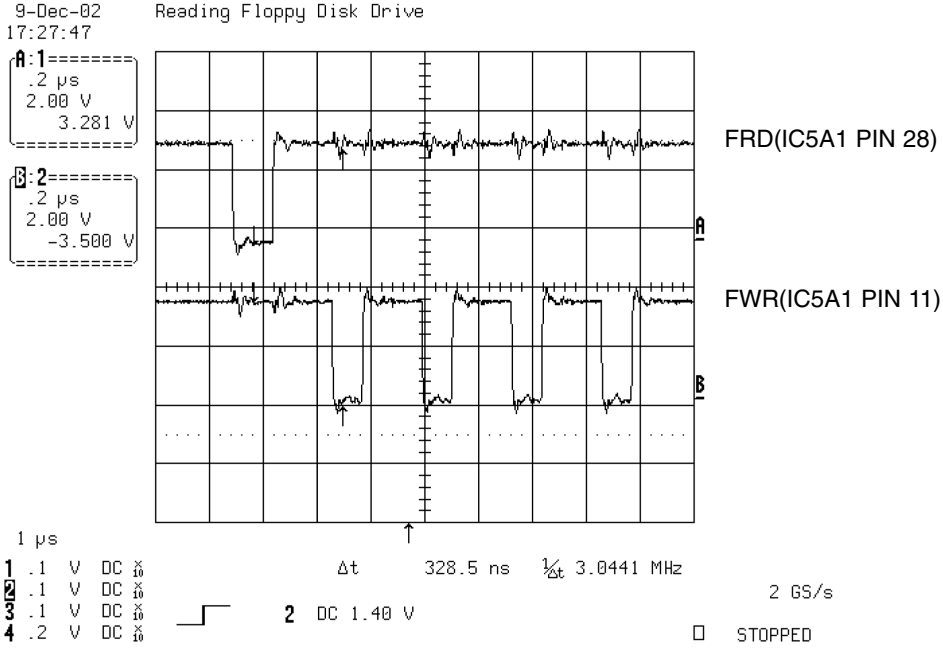


FIG 1-4

2. SDRAM CLOCK

1) MT1379 main clock is at 27MHz(X501)

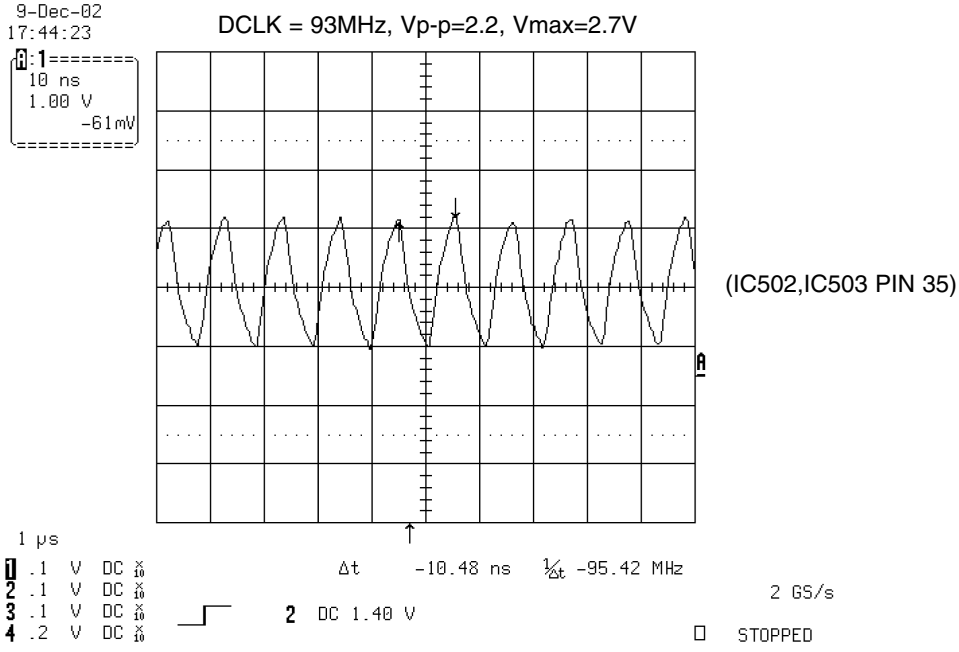


FIG 2-1

3. TRAY OPEN/CLOSE SIGNAL

1) Tray open/close waveform

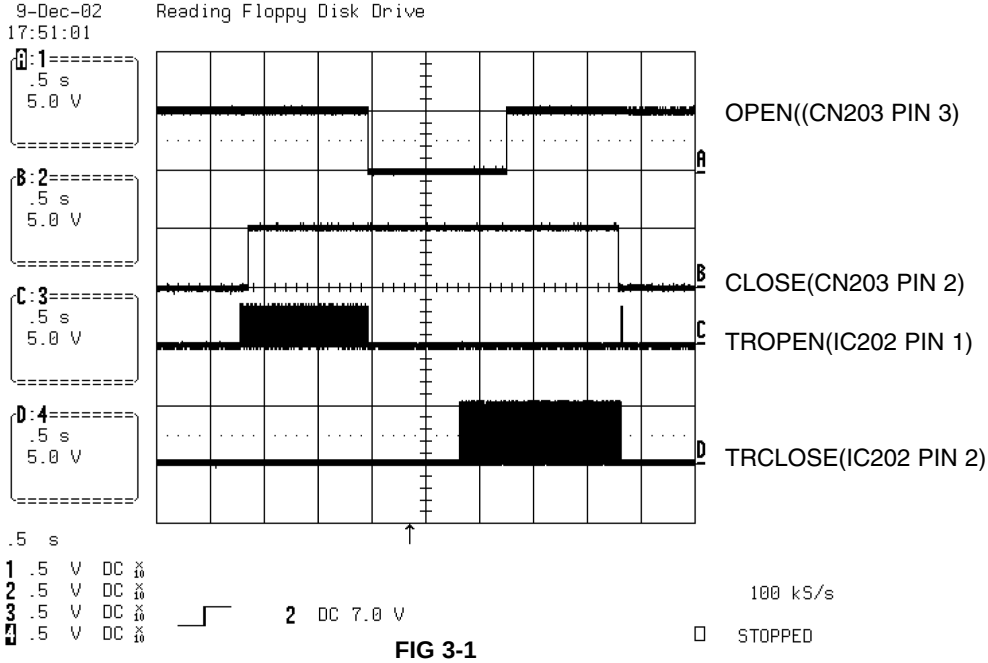


FIG 3-1

2) Tray close waveform

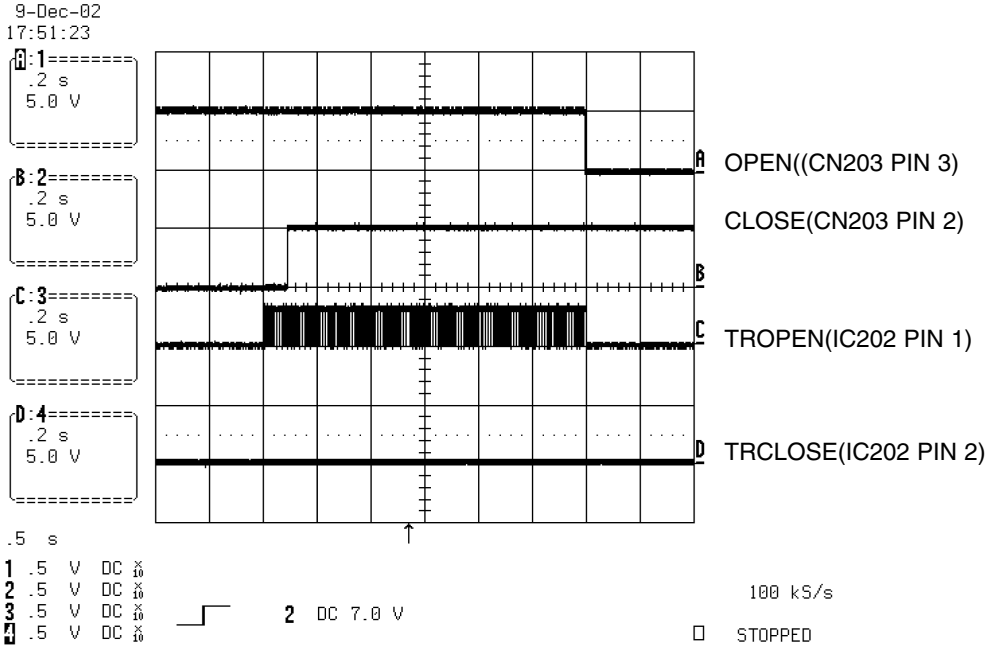


FIG 3-2

3) Tray open waveform

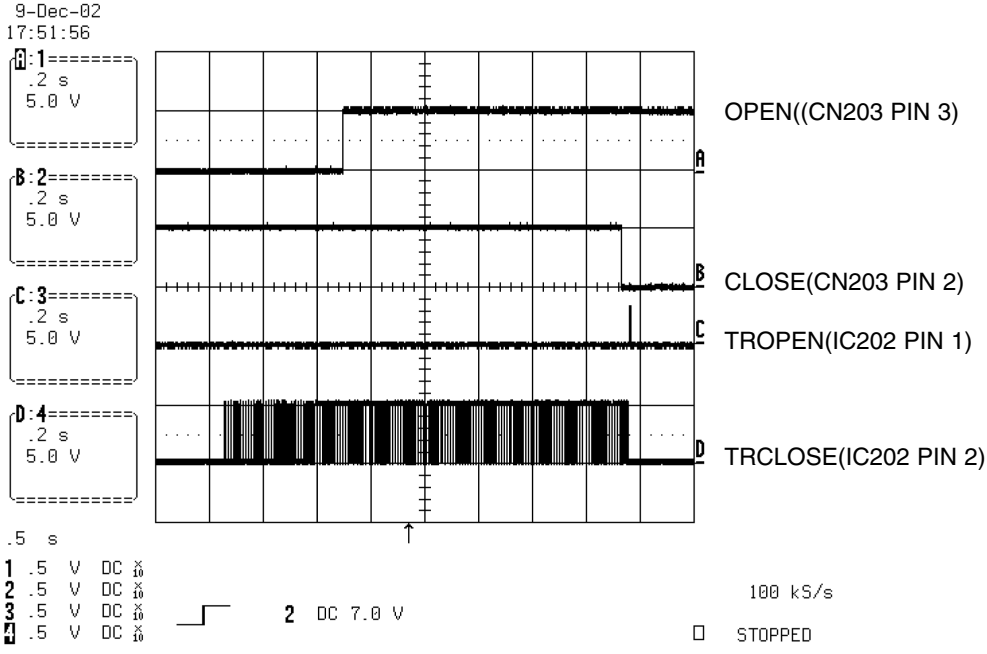
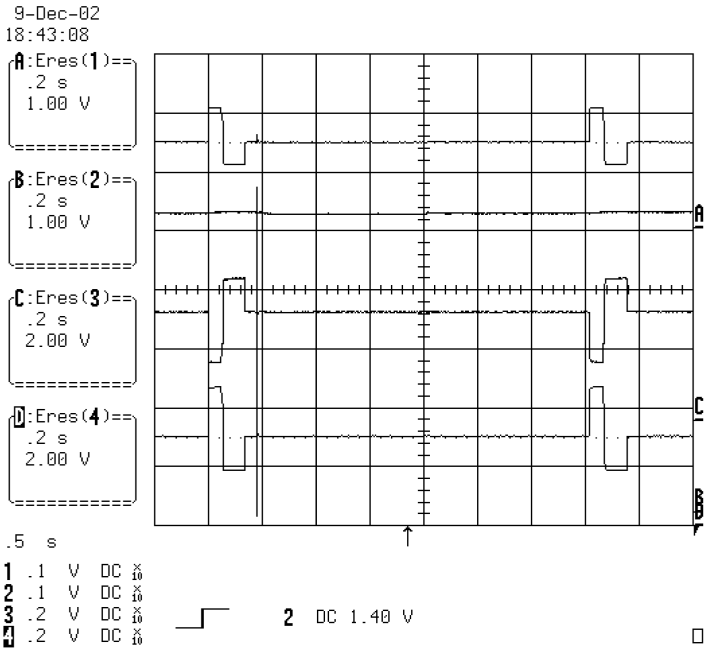


FIG 3-3

4. SLED CONTROL RELATED SIGNAL (NO DISC CONDITION)



FMSO(2.0V/1.4V/1.0V)
(IC501 PIN 19)

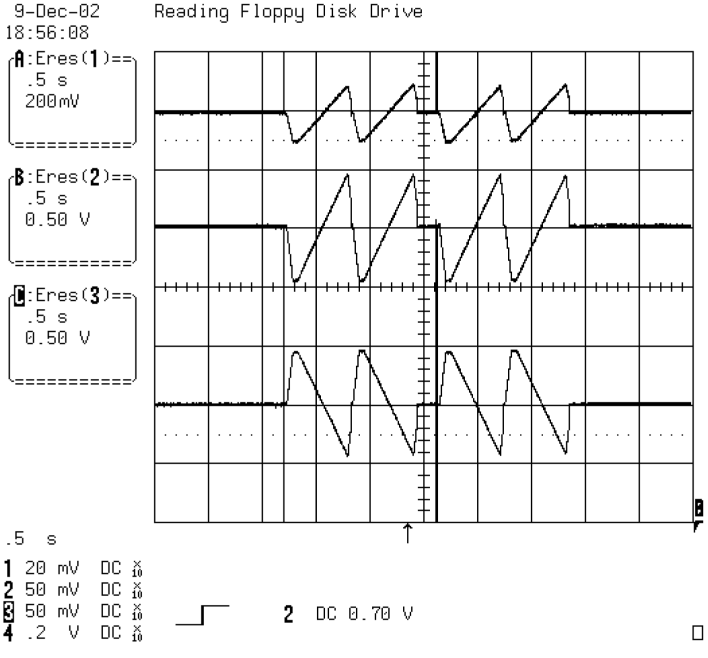
STBY(5V) – (IC201 PIN 50)

SL+(4.7V/3.6V/1.9V)
(IC202 PIN 12)

SL-(5.3V/3.7V/2.5V)
(IC202 PIN 13)

FIG 4-1

5. LENS CONTROL RELATED SIGNAL(NO DISC CONDITION)



FOSO(1.5V/1.4V/1.3V)
(IC501 PIN 12)

F+(4.0V/3.6V/3.2V)
(IC202 PIN 9)

F-(4.0V/3.6V/3.2V)
(IC202 PIN 8)

FIG 5-1

6. LASER POWER CONTROL RELATED SIGNAL(NO DISC CONDITION)

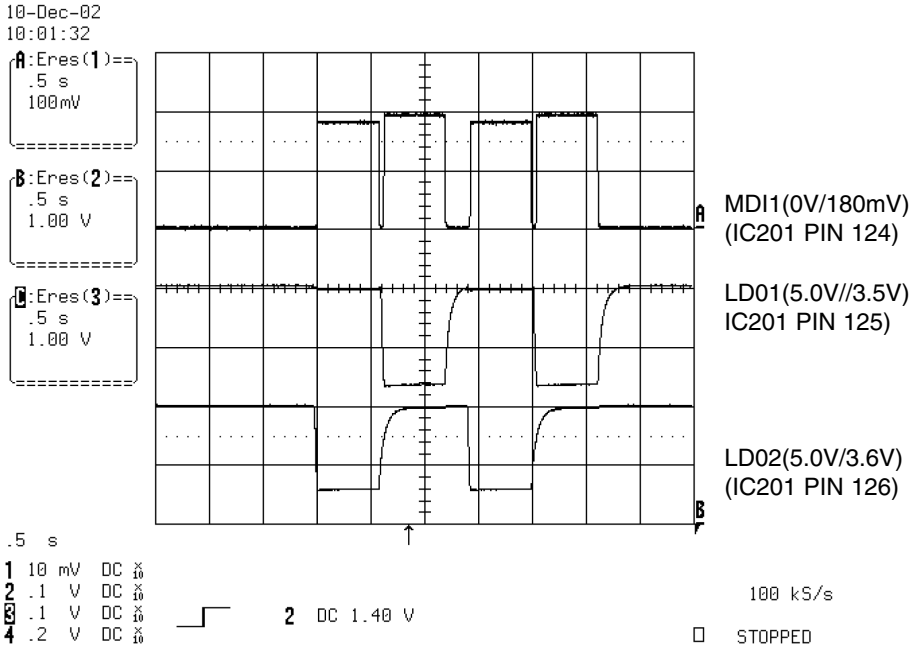


FIG 6-1

7. DISC TYPE JUDGEMENT WAVEFORM

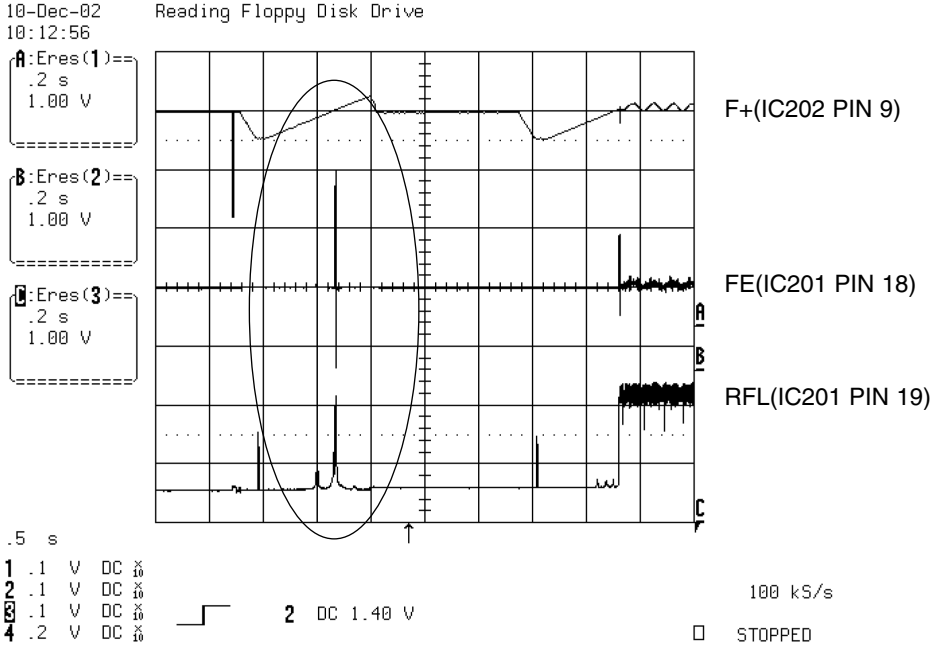


FIG 7-1 (DVD)

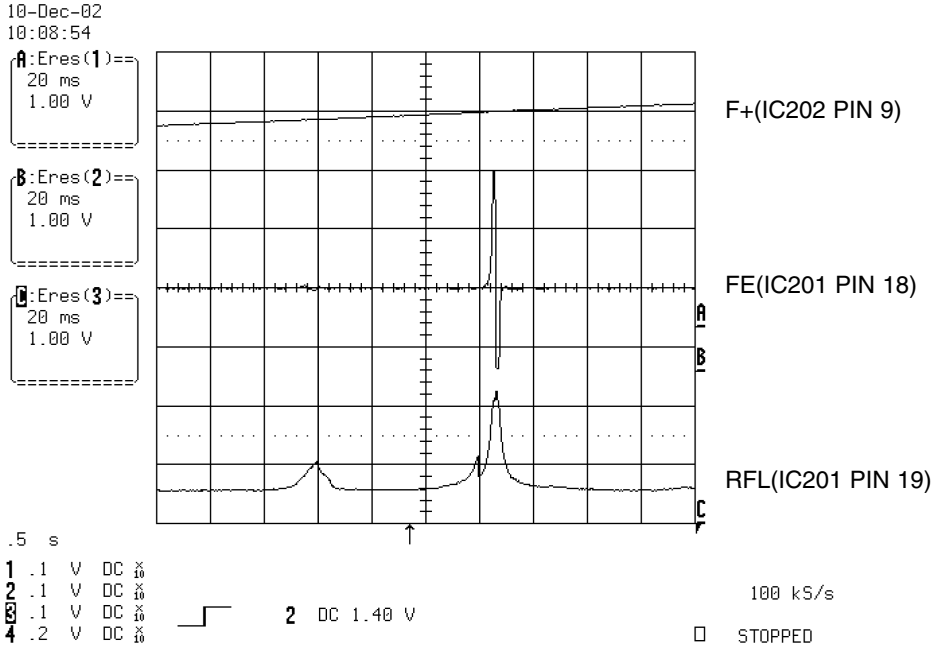


FIG 7-2 (DVD)

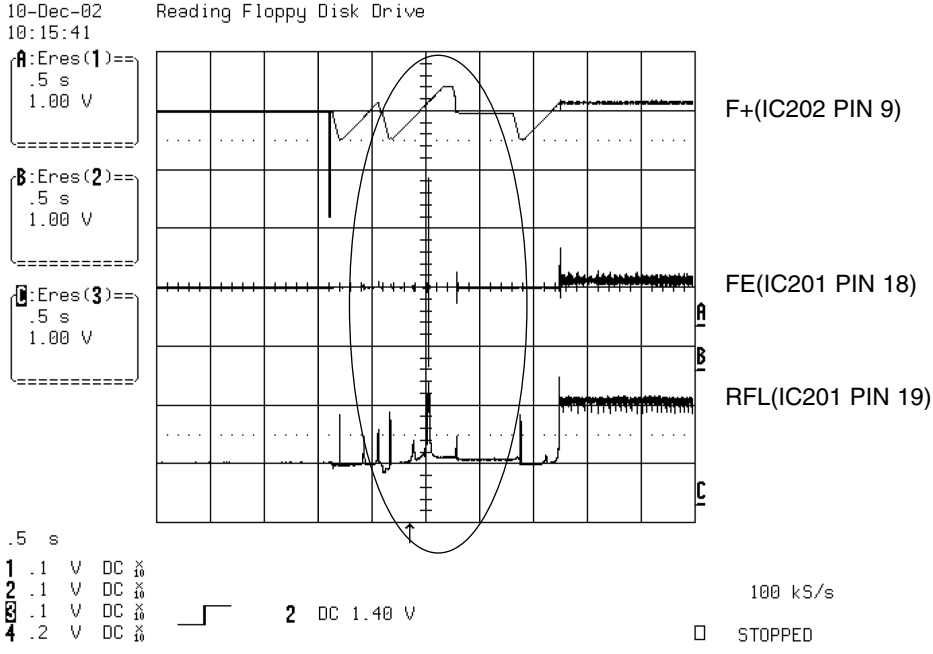


FIG 7-3 (CD)

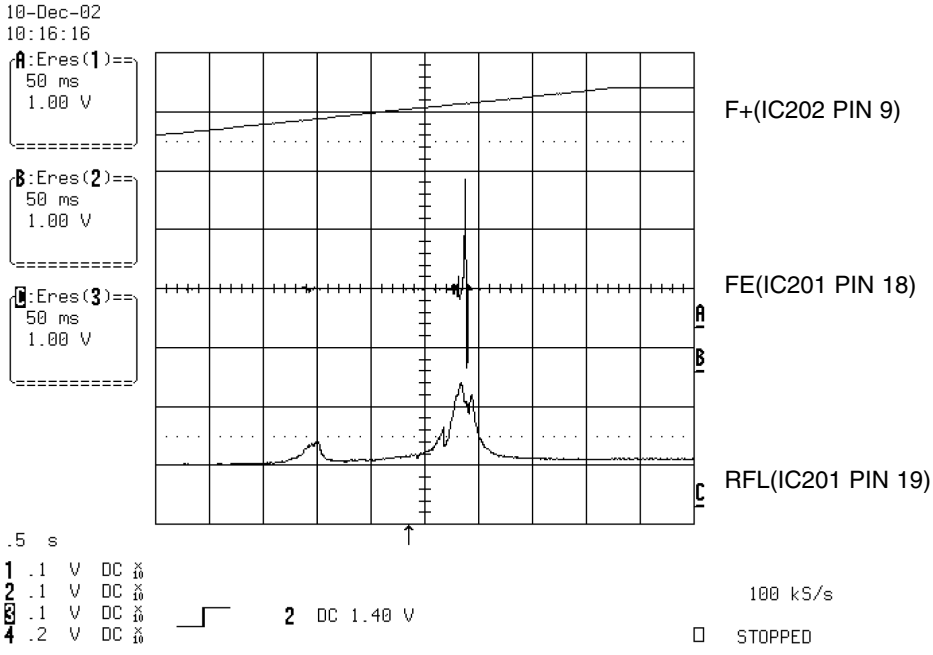


FIG 7-4 (CD)

8. FOCUS ON WAVEFORM

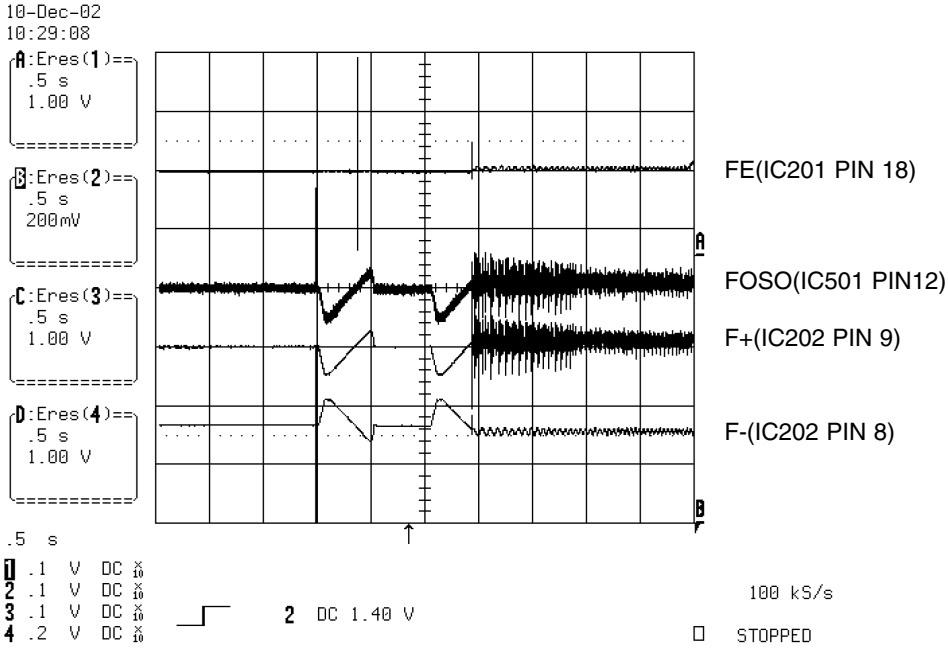


FIG 8-1 (DVD)

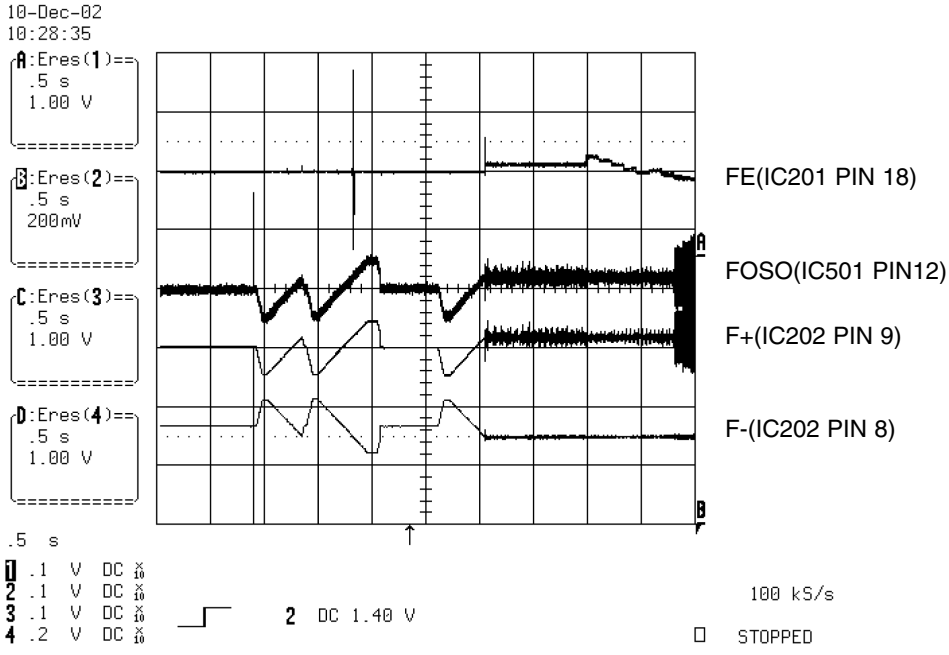


FIG 8-2 (CD)

9. SPINDLE CONTROL WAVEFORM (NO DISC CONDITION)

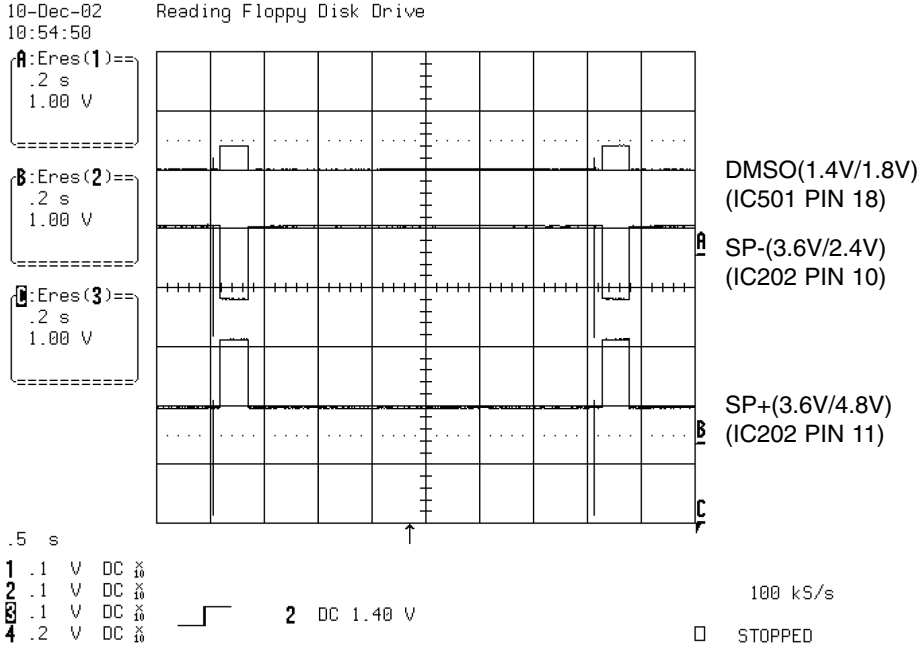


FIG 9-1

10. TRACKING CONTROL RELATED SIGNAL(System checking)

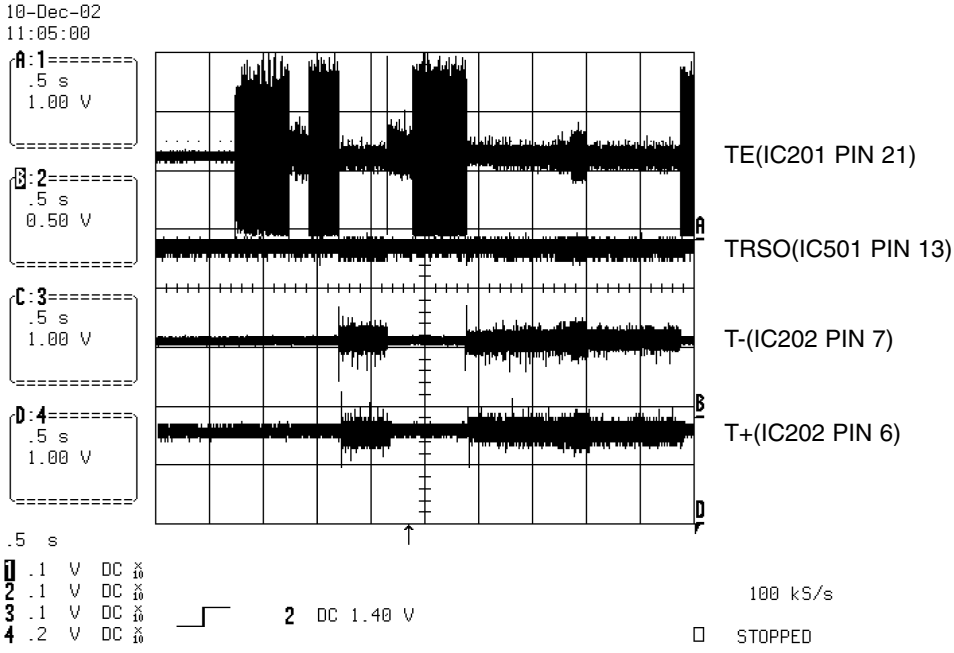


FIG 10-1(DVD)

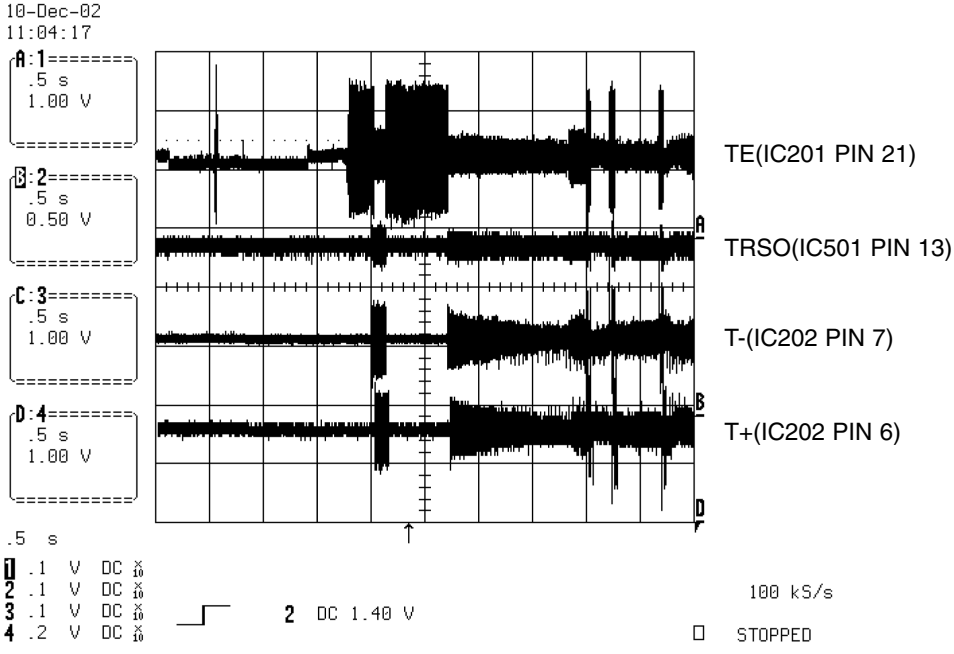


FIG 10-2(CD)

11. RF WAVEFORM

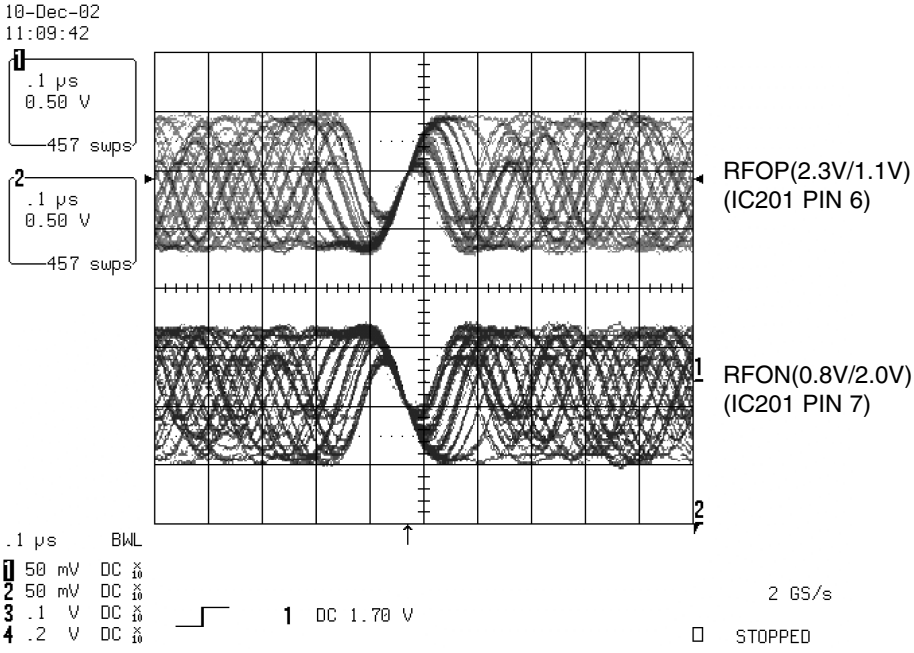


FIG 11-1

12. MT1379 AUDIO OPTICAL AND COAXIAL OUTPUT (ASPDIF)

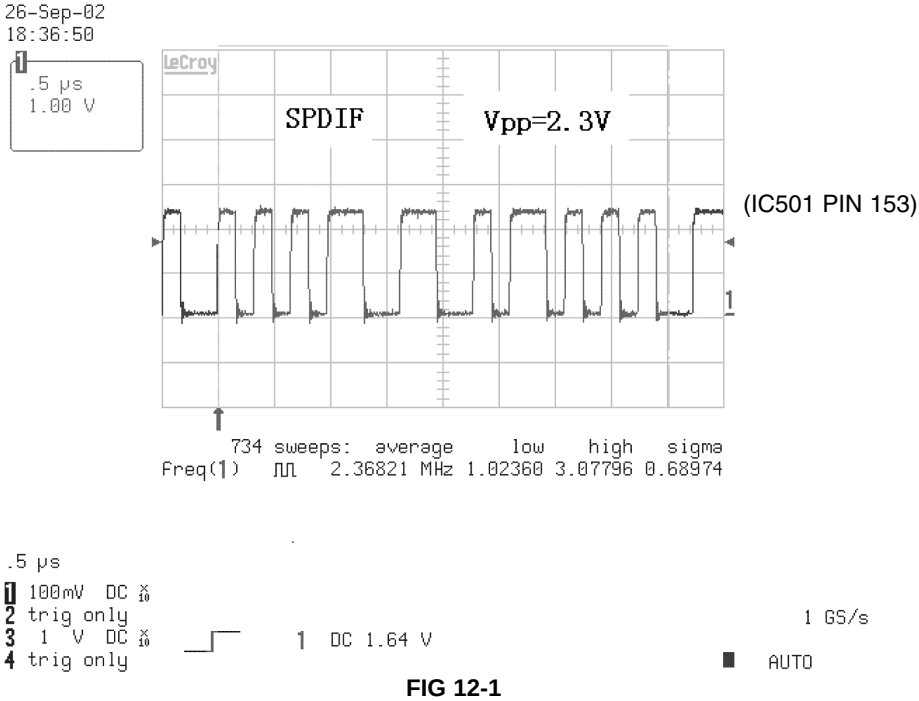
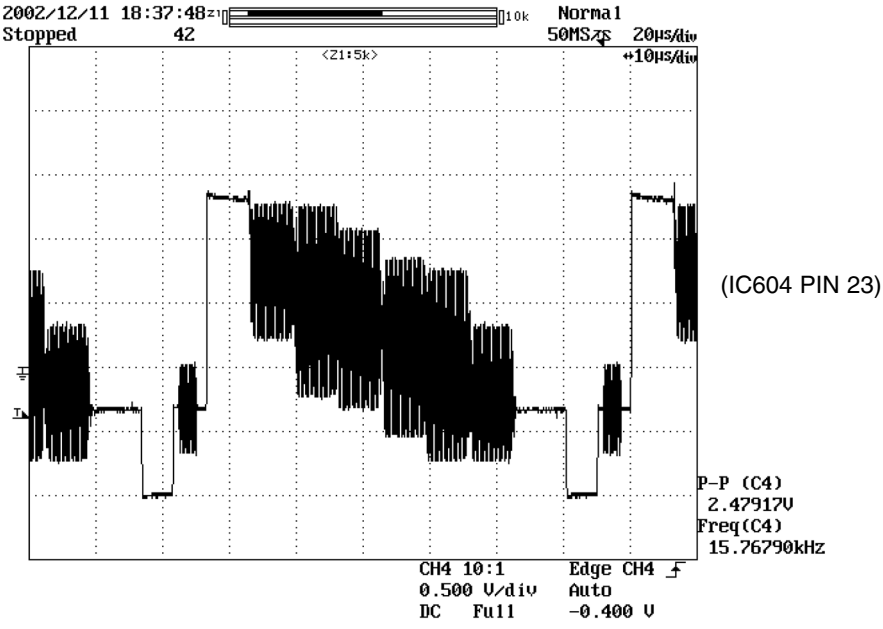


FIG 12-1

13. MT1379 VIDEO OUTPUT WAVEFORM

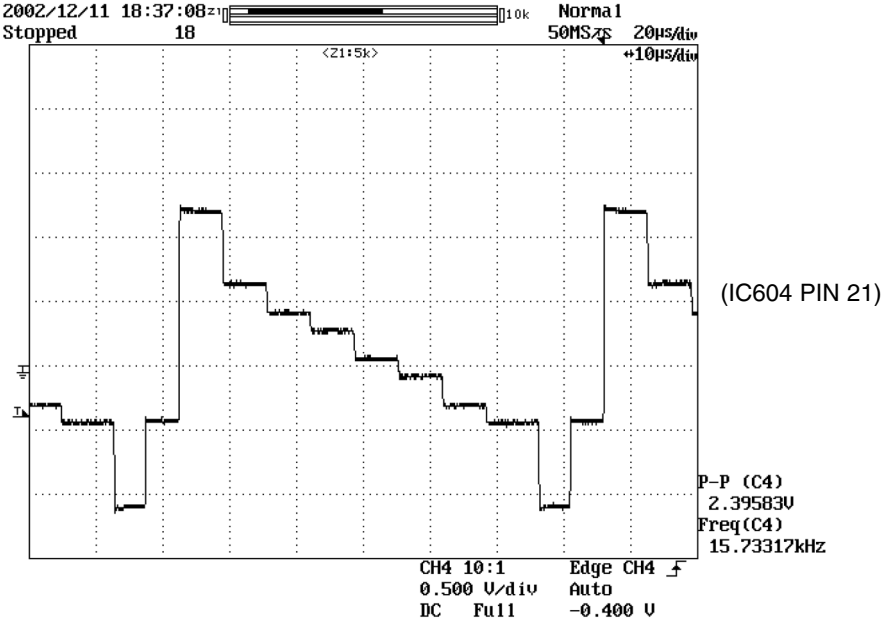
1) Full colorbar signal(CVBS)



(IC604 PIN 23)

FIG 13-1

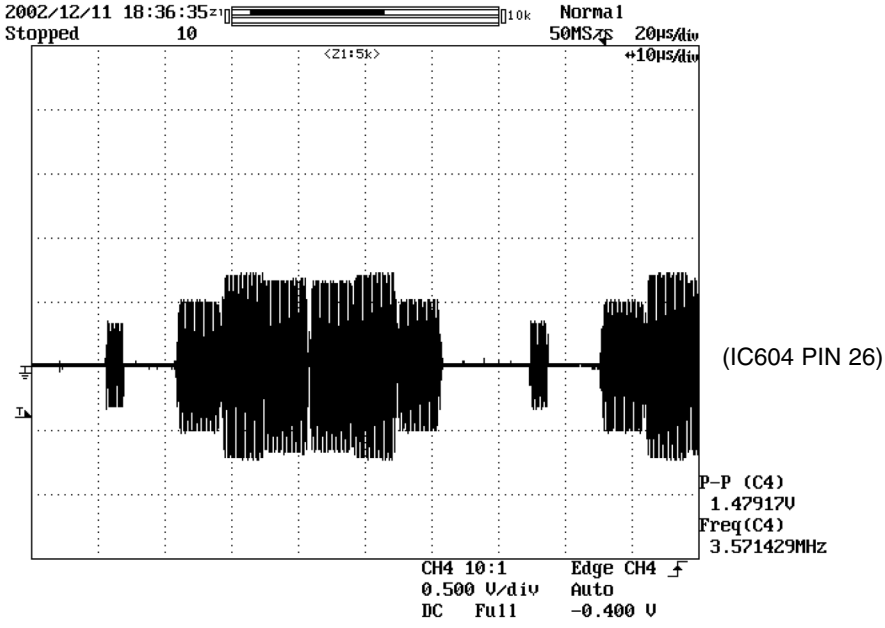
2) Y



(IC604 PIN 21)

FIG 13-2

3) C

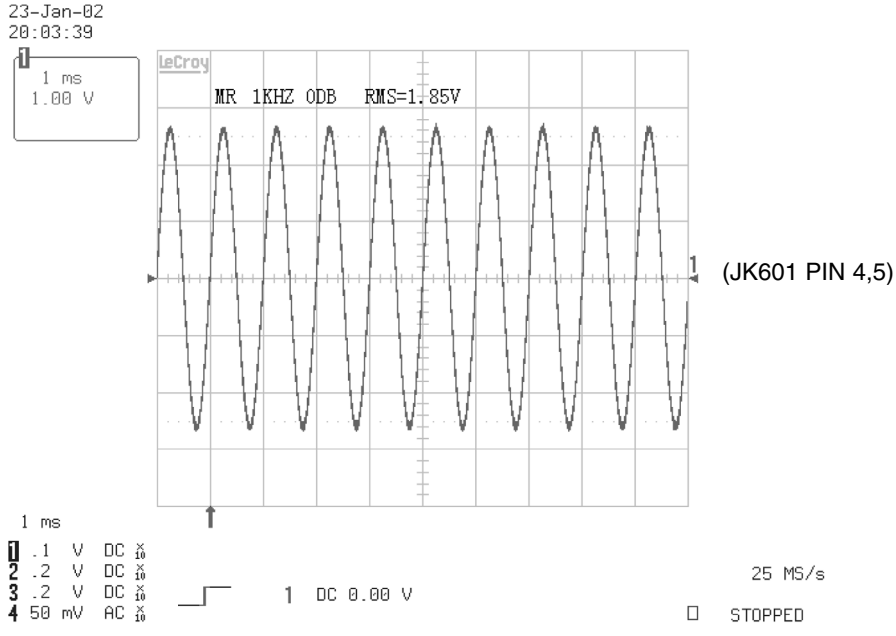


(IC604 PIN 26)

FIG 13-3

14. AUDIO OUTPUT FROM AUDIO DAC

1) Audio L/R



(JK601 PIN 4,5)

FIG 14-1

2) Audio related Signal

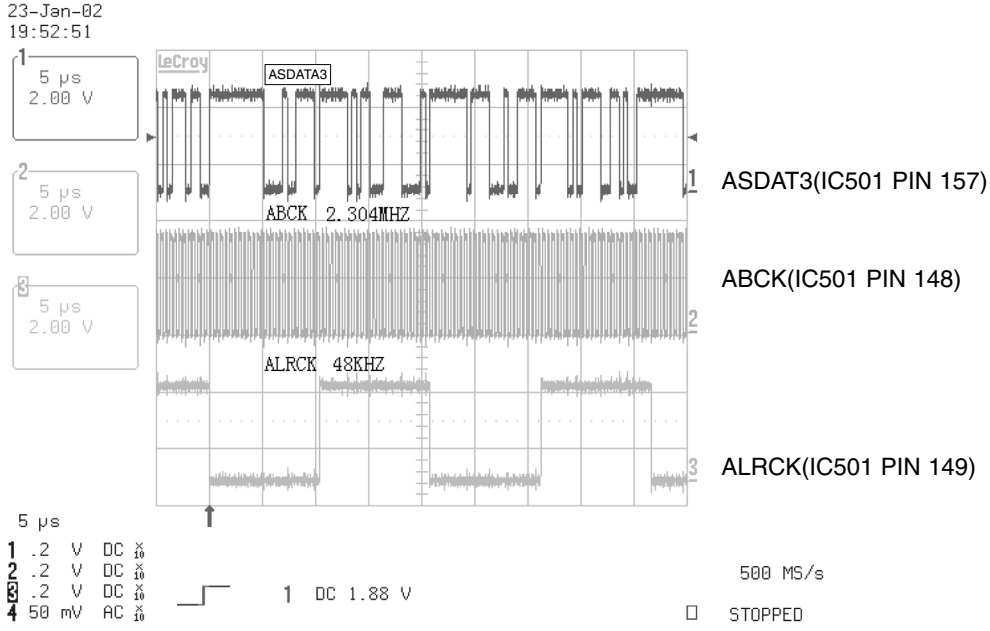


FIG 14-2

SECTION 4 MECHANISM OF VCR PART
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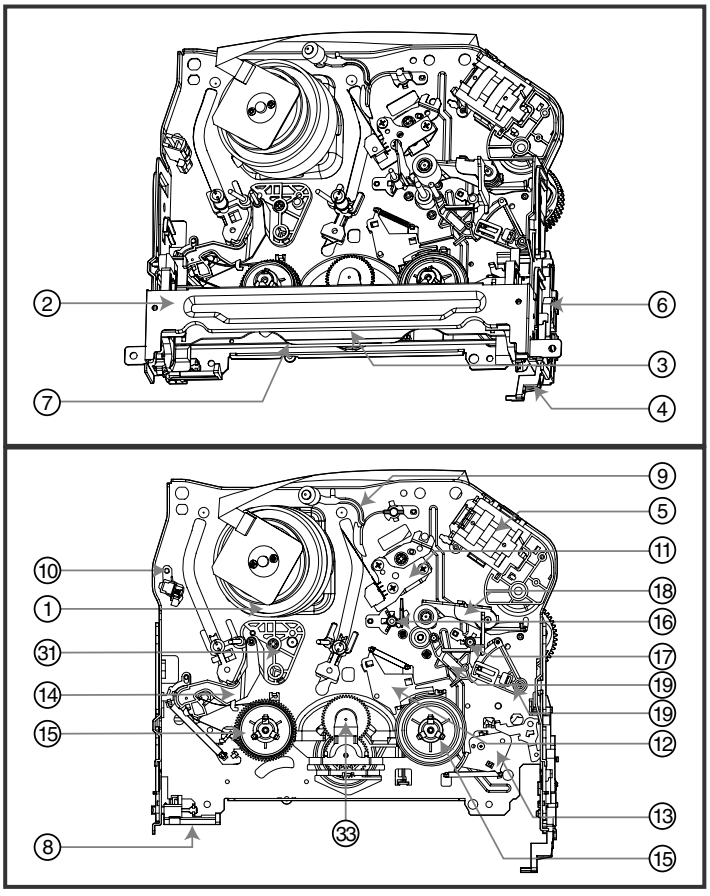
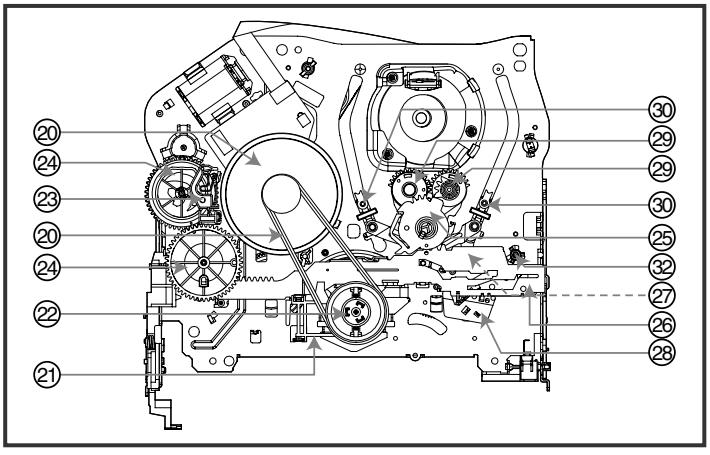
DECK MECHANISM PARTS LOCATIONS

• Top View



• Bottom View



NOTE : When reassembly perform the procedure in the reverse order.

1) When reassembling, confirm Mechanism and Mode Switch Alignment Position (Refer to Page 4-13)
2) When disassembling, the Parts for Starting No. Should be removed first.

Procedure / Starting No.		Part	Fixing Type	Figure	View
	1	Drum Assembly	3 Screw	A-1	T
	2	Plate Top	2 Hook	A-2	T
2	3	Holder Assembly CST	Chassis Hole	A-2	T
2	4	Opener Door	Chassis Hole	A-2	T
	5	Bracket Assembly L/D Motor	3 Hook	A-2	T
2,3,4	6	Gear Assembly Rack F/L	1 Hook, Chassis Hole	A-2	T
2,3,4,6	7	Arm Assembly F/L	Chassis Hole	A-2	T
	8	Lever Assembly S/W	1 Hook	A-2	T
	9	Arm Assembly Cleaner	Chassis Embossing	A-3	T
	10	Head F/E	Chassis Embossing	A-3	T
	11	Base Assembly A/C Head	1 Screw	A-3	T
2,3	12	Brake Assembly T	1 Hook	A-4	T
2,3	13	Brake Assembly RS	1 Hook	A-4	T
2,3	14	Arm Assembly Tension	2 Hook	A-4	T
2,3,12,13, 14	15	Reel S/Reel T		A-4	T
	16	Base Assembly P4	Chassis Embossing	A-5	T
	17	Opener Lid	Chassis Embossing	A-5	T
17	18	Arm Assembly Pinch	Shaft	A-5	T
17	19	Lever T/Up / Arm T/Up	1 Hook	A-5	T
17,18	20	Belt Capstan/Motor Capstan	3 Screw	A-6	B
	21	Lever F/R	Locking Tab	A-6	B
20, 21	22	Clutch Assembly D35	Washer	A-6	B
	23	Brake Assembly Capstan	Locking Tab	A-6	B
	24	Gear Drive/Gear Cam	Washer/Hook	A-7	B
	25	Gear Sector	1 Hook	A-7	B
20,21,23, 24,25	26	Plate Slider	Shaft Guide	A-7	B
20,21,23, 24,25,26	27	Lever Tension	1 Hook	A-7	B
2,3,14,20, 21,25,23, 24,26	28	Lever Spring	Locking Tab	A7	B
25	29	Gear Assembly P2/Gear Assembly P3	Boss	A-8	B
2,3,14,25, 29	30	Base Assembly P2/Base Assembly P3	Chassis Slot	A-8	B
2,3,14,25, 29	31	Base Loading	1 Screw	A-9	T
2,3,14	32	Base Tension	Chassis Embossing	A-9	B
2,3,20,21, 22	33	Arm Assembly Idler	Locking Tab	A-9	T

T:Top, B:Bottom

DECK MECHANISM DISASSEMBLY

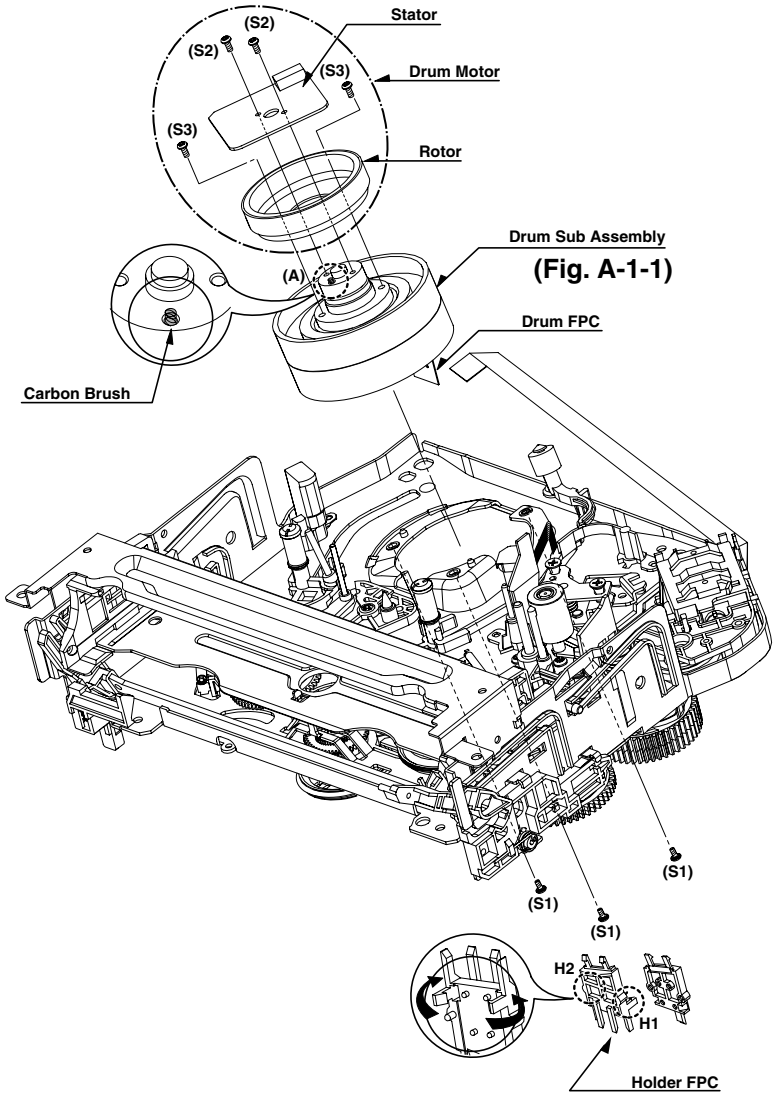


Fig. A-1

1. Drum Assembly (Fig. A-1-1)

1) Unplug the Drum FPC Connector.
2) Remove three Screws(S1) on bottom side and separate the Drum assembly.
3) Unhook (H1), (H2) and separate the Holder FPC and Cap FPC.

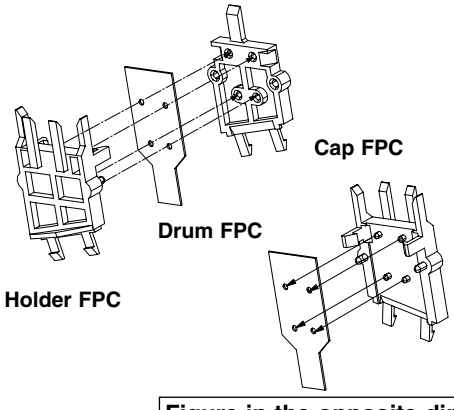
1-1. Drum Motor

1) Remove two Screws(S2) and disassemble the Stator of the Drum Motor.
2) Remove two Screws(S3) and separate the Rotor of the Drum Motor from the Drum Sub assembly.

NOTE

When reassembling, confirm (A) portion of the Drum Sub assembly whether the Carbon Brush is in there or not.

(Fig. B-1)



DECK MECHANISM DISASSEMBLY

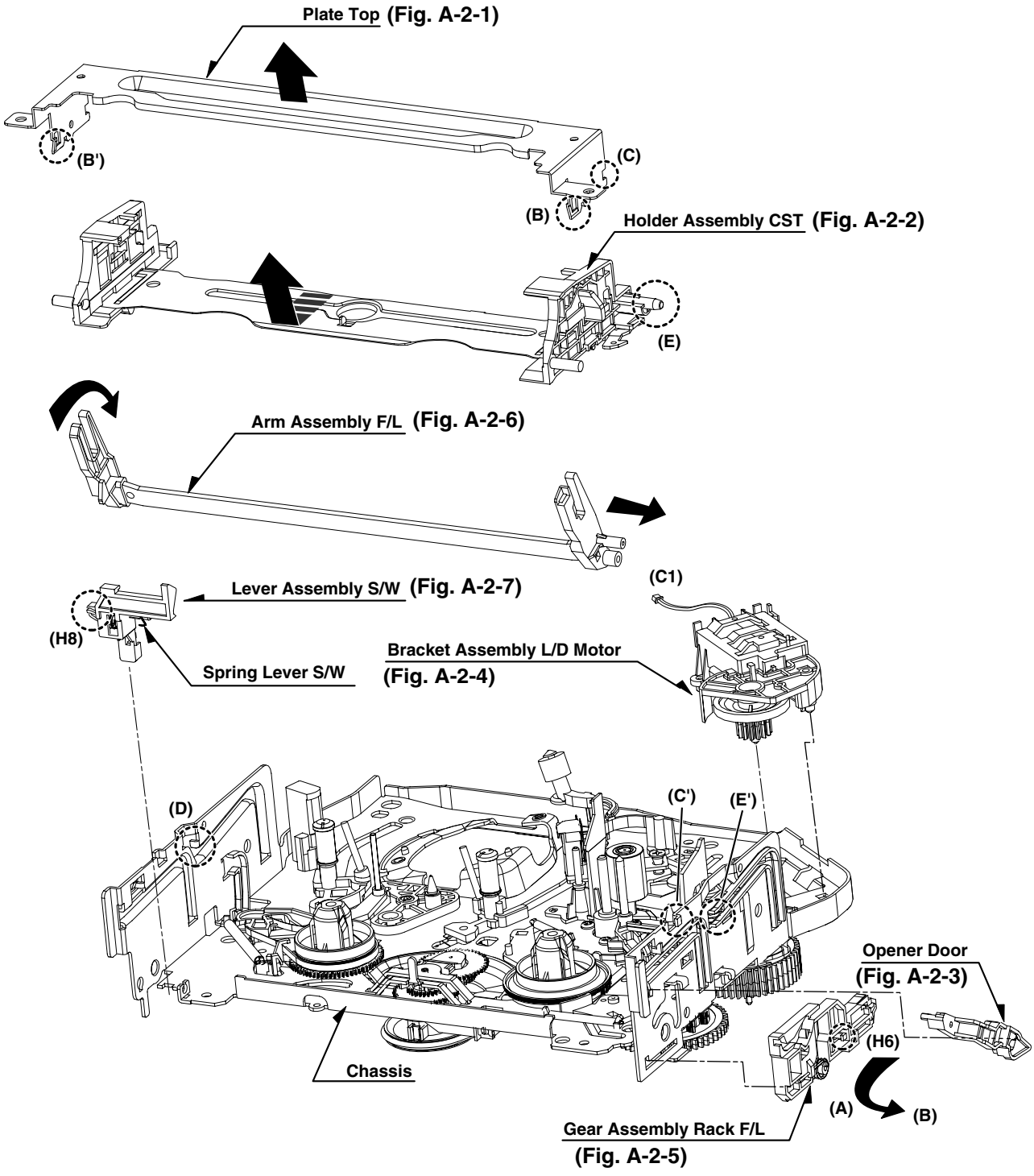


Fig. A-2

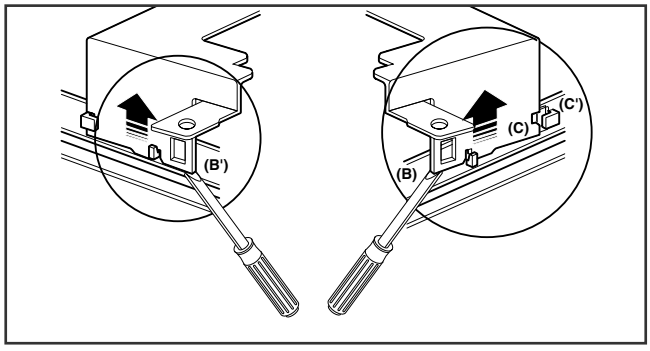
DECK MECHANISM DISASSEMBLY

2. Plate Top (Fig. A-2-1)

1) Pull the (B) portion of the Plate Top back in direction of arrow and separate the right side of it.
2) pull the (B') portion of the Plate Top back in direction of arrow and separate the left side of it.
   (Used tools : (-) type driver, anything tool with sharp point or flat point.)

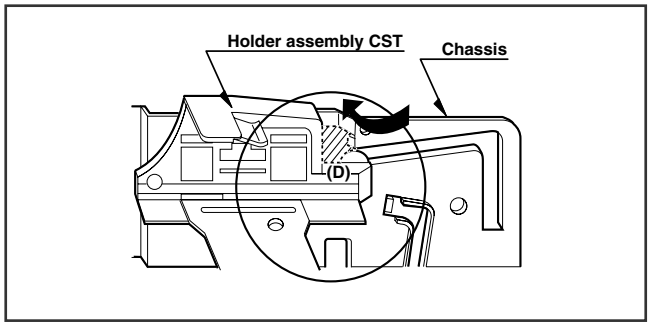
NOTE

(1) When reassembling, push the Plate Top after alignment the two position(C), (C') as below Fig.



3. Holder Assembly CST (Fig.A-2-2)

1) Move the Holder Assembly CST in direction of arrow and separate the left side of it first through the (D) position of the Chassis.



2) Disassemble the right side of the Holder Assembly CST from each guided hole of the Chassis.

NOTE

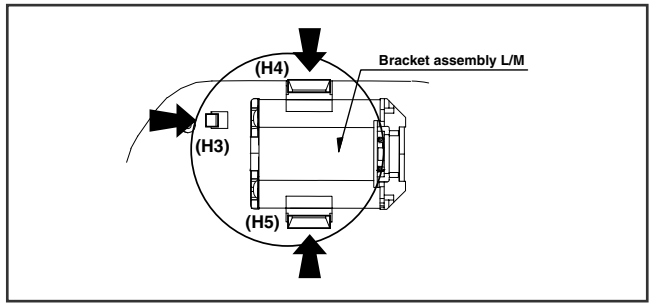
When reassembling, insert the (E) part of the Holder Assembly CST in the (E') hole of the Chassis first and assemble the left side of it.

4. Opener Door (Figure. A-2-3)

1) Turn the Opener Door clockwise and remove it through the guide hole of the Chassis.

5. Bracket Assembly L/D Motor (Fig. A-2-4)

1) Unplug the Connector(C1).
2) Unhook three Hooks(H3, H4, H5) on bottom side of the Chassis, lift up the Bracket Assembly L/M and disassemble the Bracket Assembly L/D Motor.

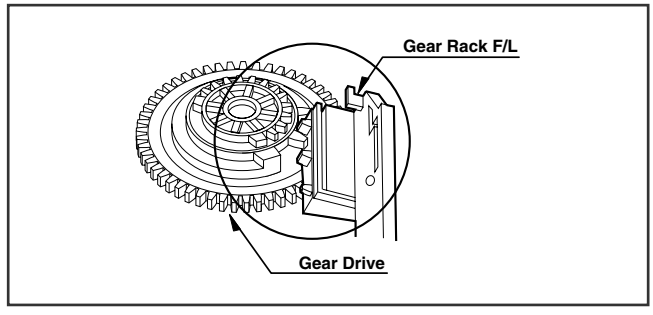


6. Gear Assembly Rack F/L (Fig. A-2-5)

1) Move the Gear Assembly Rack F/L in direction of arrow(A) and unhook the Hook(H6) pulling back in front.
2) Separate the Gear Rack F/L in direction of arrow(B).

NOTE

When reassembling, align the gear part of the Gear Assembly Rack F/L with the Gear Drive as below Fig.

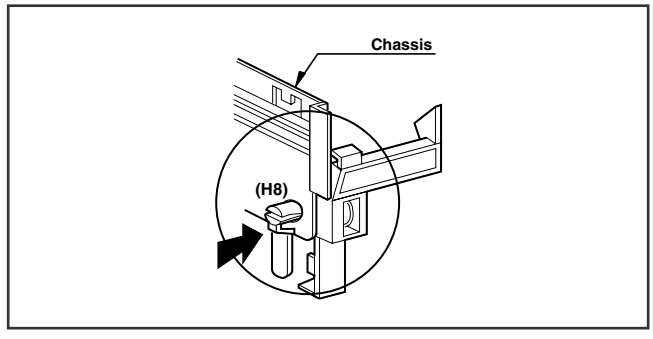


7. Arm Assembly F/L (Fig. A-2-6)

1) Move the Arm Assembly F/L in direction of arrow and separate the left side of it first.
2) Disassemble the Arm Assembly F/L from each guided hole of the Chassis.

8. Lever Assembly S/W(Fig. A-2-7)

1) Unhook the Hook(H8) in the left side of the Chassis and remove the Lever Assembly S/W.



DECK MECHANISM DISASSEMBLY

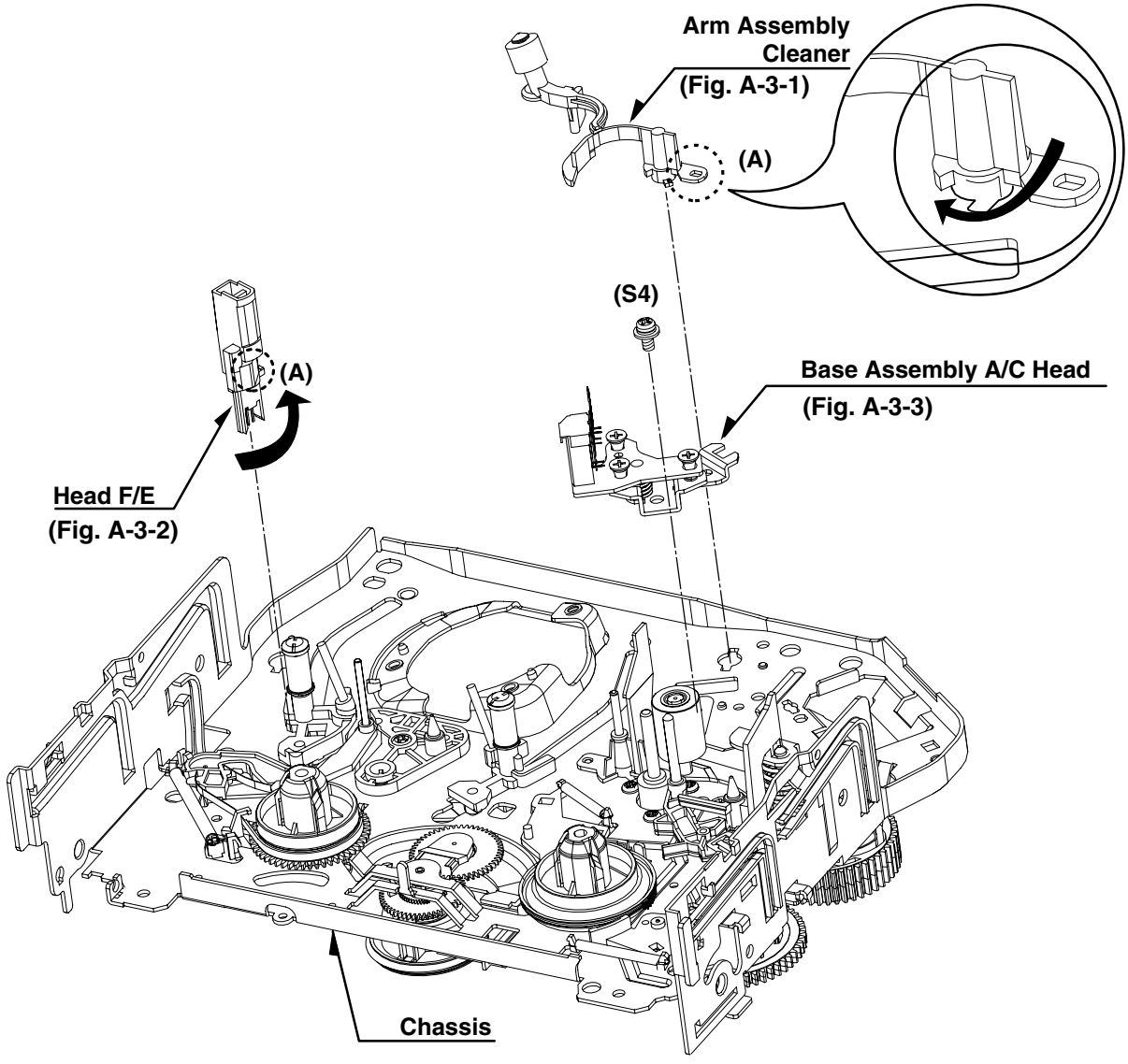


Fig. A-3

9. Arm Assembly Cleaner (Fig. A-3-1)

1) Breakaway the (A) portion as Fig. A-3-1 from the embossing of the Chassis, turn the Arm assembly Cleaner to clockwise direction and lift it up.

10. Head F/E (Fig. A-3-2)

1) Breakaway the (A) portion of the Head F/E from the embossing of the Chassis, turn it to counterclockwise direction and lift it up.

11. Base Assembly A/C Head (Fig. A-3-3)

1) Remove the Screw(S4) and lift the Base Assembly A/C Head up.

DECK MECHANISM DISASSEMBLY

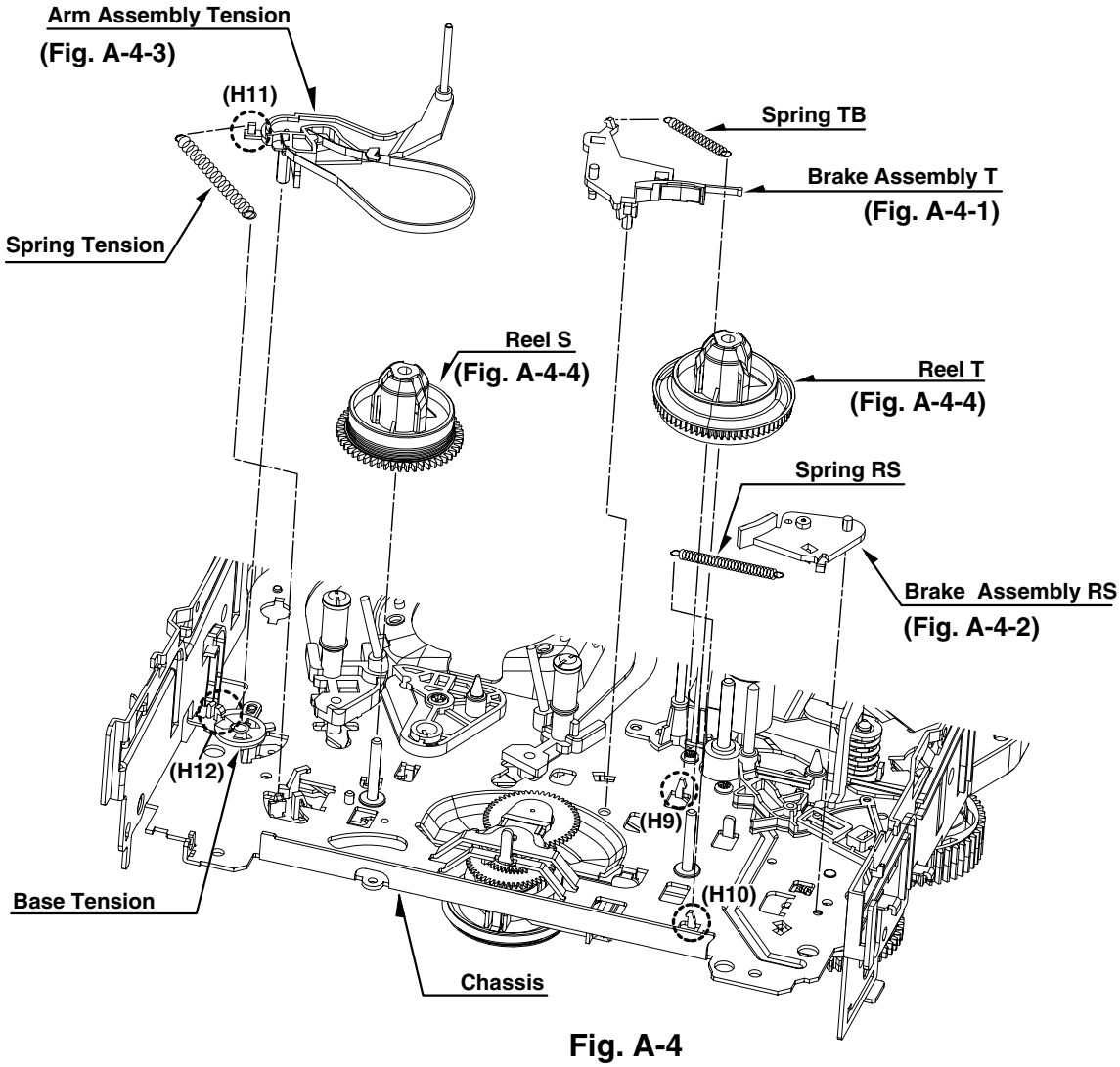


Fig. A-4

12. Brake Assembly T (Fig. A-4-1)

1) Unhook the Spring TB from the Hook(H9) of the Chassis.
2) Lift the Brake Assembly T up.

13. Brake Assembly RS (Fig. A-4-2)

1) Unhook the Spring RS from the Hook(H10) of the Chassis.
2) Lift the Brake Assembly T up.

14. Arm Assembly Tension (Fig. A-4-3)

1) Unhook the Spring Tension from the Hook(H11) of the Arm Assembly Tension.
2) Unhook the Hook(H12) of the Base Tension and lift the Arm Assembly Tension up.

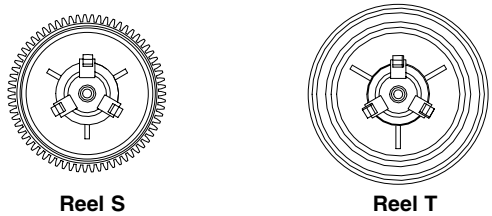
NOTE

Difference for Springs

	Spring TB
	Spring RS **Color (Black)**
	Spring Tension

15. Reel S / Reel T (Fig. A-4-4)

1) Difference for Reel S / Reel T



DECK MECHANISM DISASSEMBLY

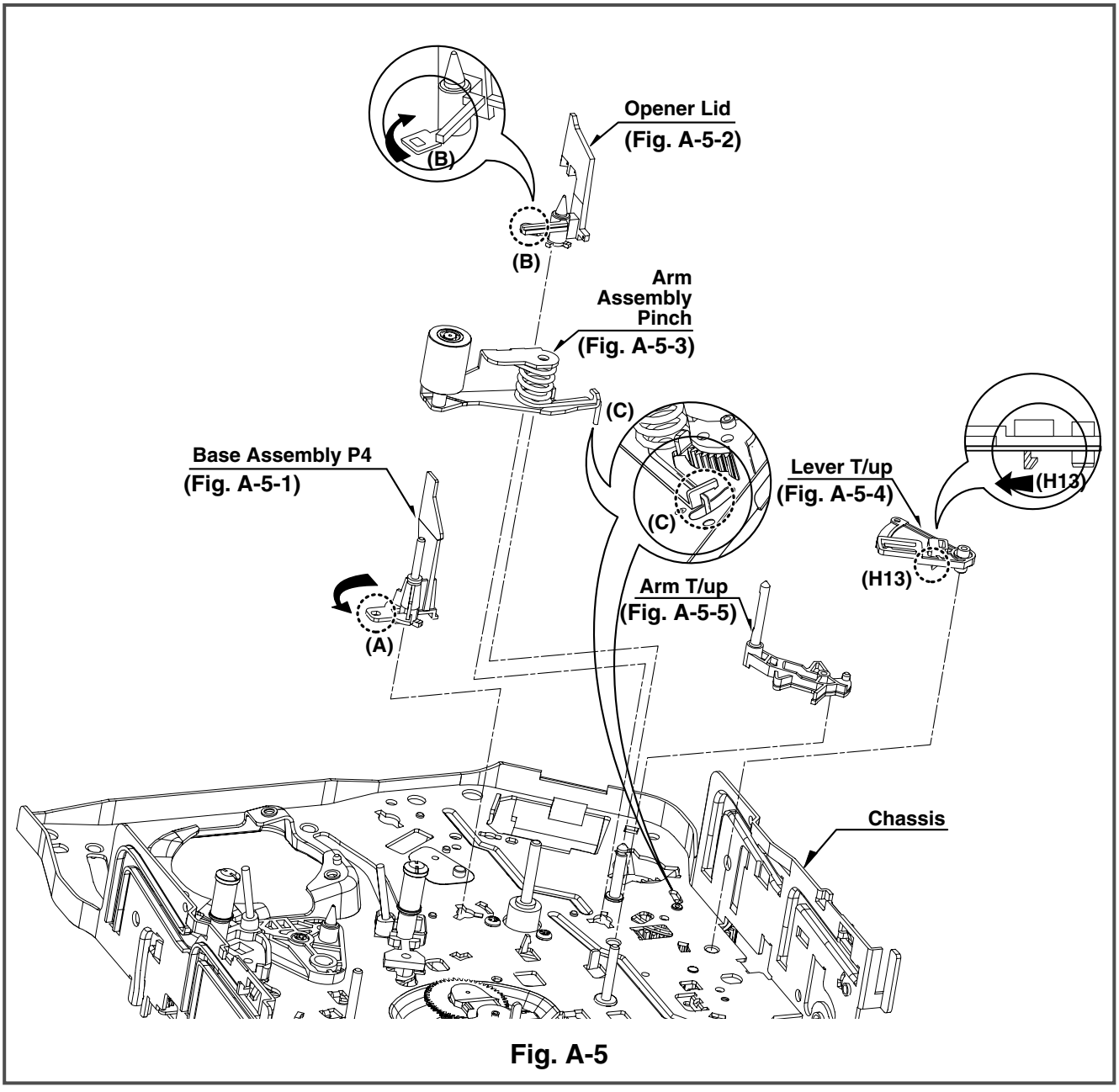


Fig. A-5

16. Base Assembly P4 (Fig. A-5-1)

1) Breakaway the (A) portion of the Base Assembly P4 from the embossing of the Chassis.
2) Turn the Base Assembly P4 to counterclockwise direction and lift it up.

17. Opener Lid (Fig. A-5-2)

1) Breakaway the (B) portion of the Opener Lid from the embossing of the Chassis.
2) Turn the Opener Lid to clockwise direction and lift it up.

18. Arm Assembly Pinch (Fig. A-5-3)

1) Lift the Arm Assembly Pinch up.

NOTE

When reassembling, confirm the (C) portion of the Arm Assembly Pinch is inserted to the Chassis hole correctly as Fig.

19. Lever T/up (Fig. A-5-4)/ Arm T/up (Fig. A-5-5)

1) Unhook the Hook(H13) of the bottom Chassis and lift the Lever T/up up.
2) Lift the Arm T/up up.

DECK MECHANISM DISASSEMBLY

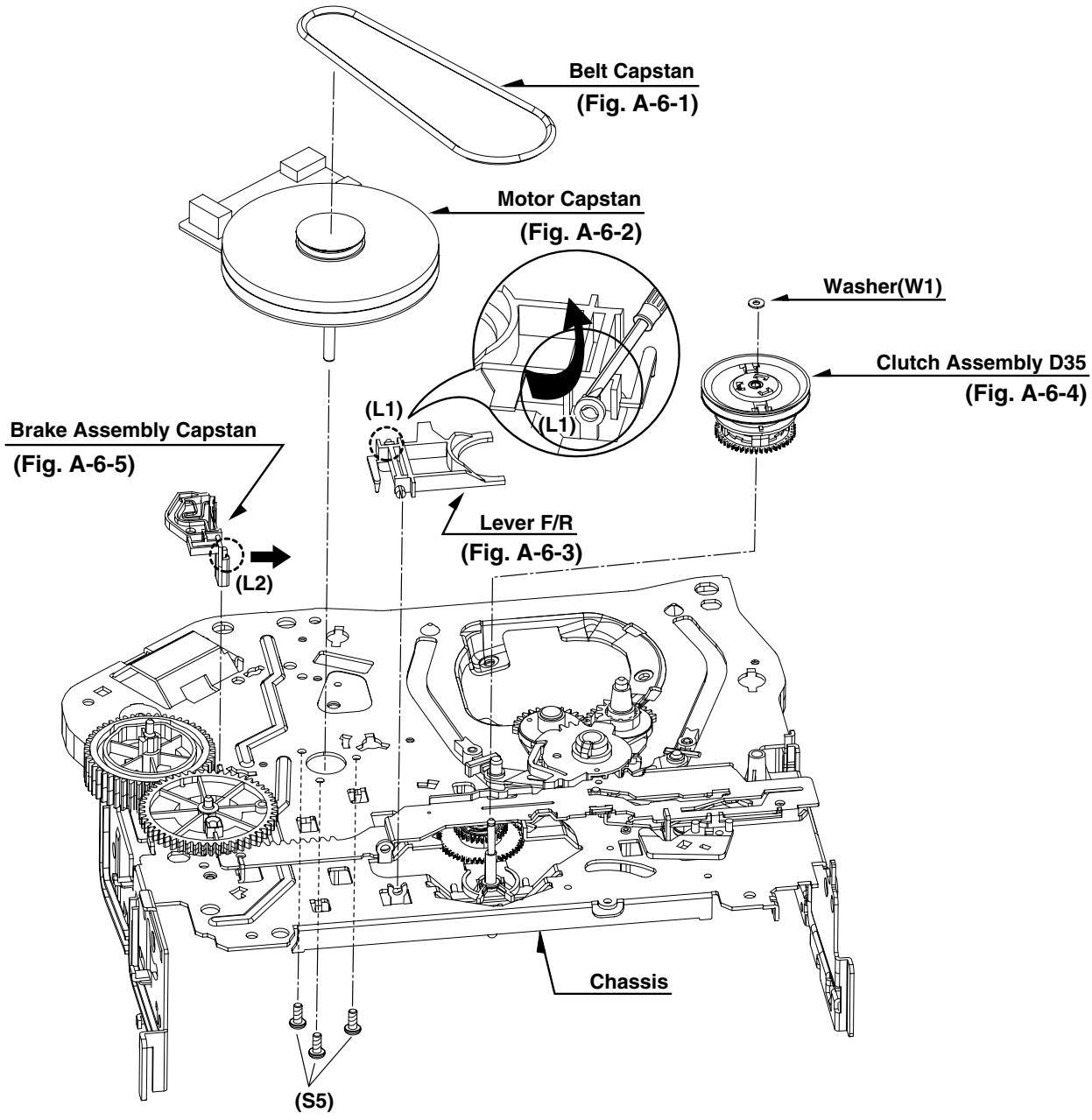


Fig. A-6

20. Belt Capstan (Fig. A-6-1)/ Motor Capstan (Fig. A-6-2)

1) Remove the Belt Capstan.
2) Remove the three Screws(S5) on bottom Chassis and lift the Motor Capstan up.

21. Lever F/R (Fig. A-6-3)

1) Unlock the Locking Tab(L1) as Fig. A-6-3 and lift the Lever F/R up.

22. Clutch Assembly D35 (Fig. A-6-4)

1) Remove the Washer(W1) and lift the Clutch Assembly D35 up.

23. Brake Assembly Capstan (Fig. A-6-5)

1) Pull the Locking Tab(L2) back in direction of arrow and lift it up.

DECK MECHANISM DISASSEMBLY

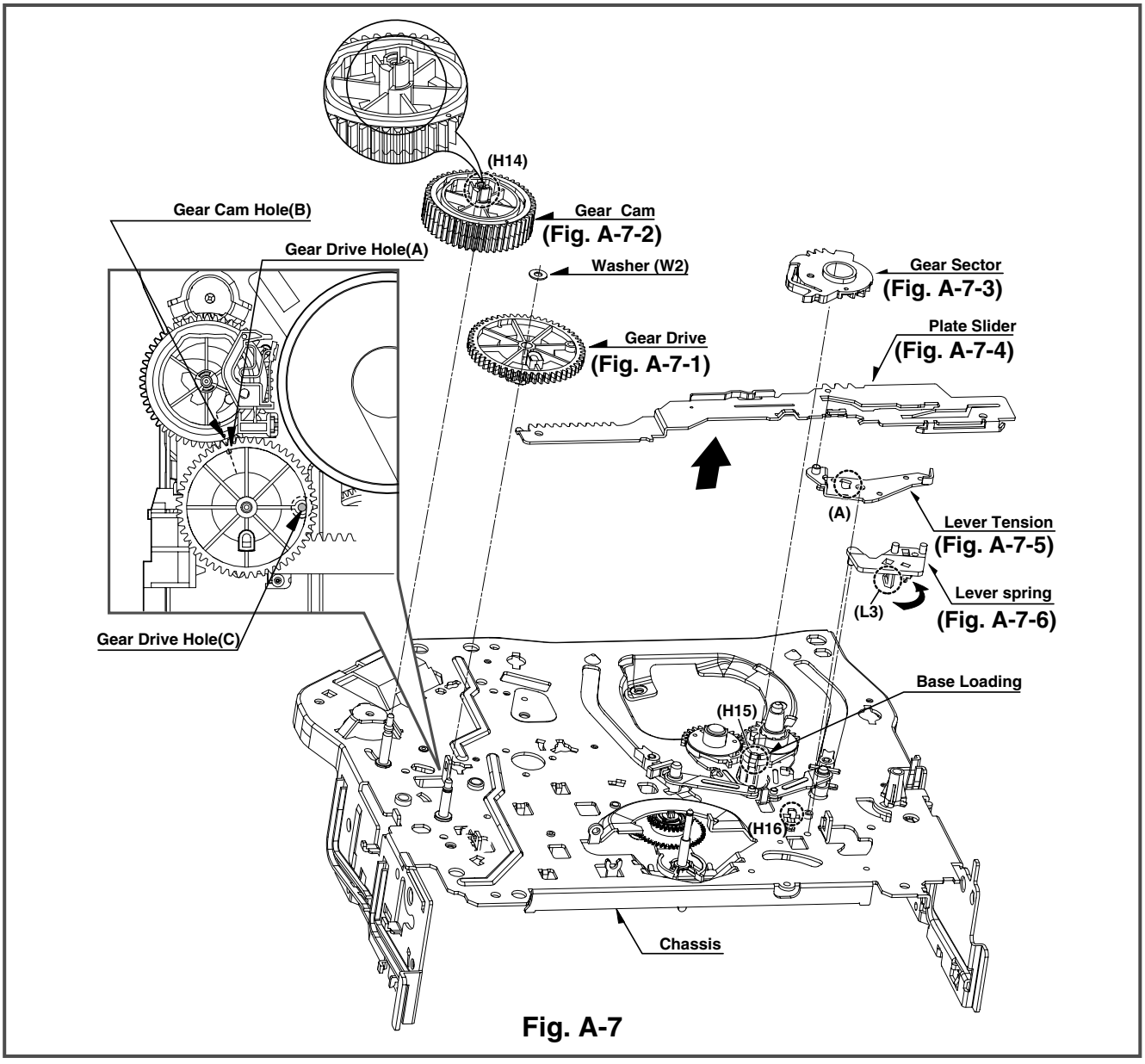


Fig. A-7

24. Gear Drive (Fig. A-7-1)/ Gear Cam (Fig. A-7-2)

1) Remove the Washer(W2) and lift the Gear Drive up.
2) Unhook the Hook(H14) of the Gear Cam and lift the Gear Cam up.

NOTE

When reassembling, align the Gear Drive Hole(A) and the Gear Cam Hole(B) in a straight line after the Gear Drive Hole(C) is aligned with the Chassis Hole as Fig.

25. Gear Sector (Fig. A-7-3)

1) Unhook the Hook(H15) of the Base Loading on bottom Chassis and lift the Gear Sector up.

26. Plate Slider (Fig. A-7-4)

1) Just lift the Plate Slider up.

27. Lever Tension (Fig. A-7-5)

1) Unhook the (A) portion of the Lever Tension from the Hook(H16) of the Chassis.
2) Turn the Lever Tension to counterclockwise direction and lift it up.

28. Lever Spring (Fig. A-7-6)

1) Unlock the Locking Tab(L3) of the bottom Chassis and lift the Lever Spring up.

DECK MECHANISM DISASSEMBLY

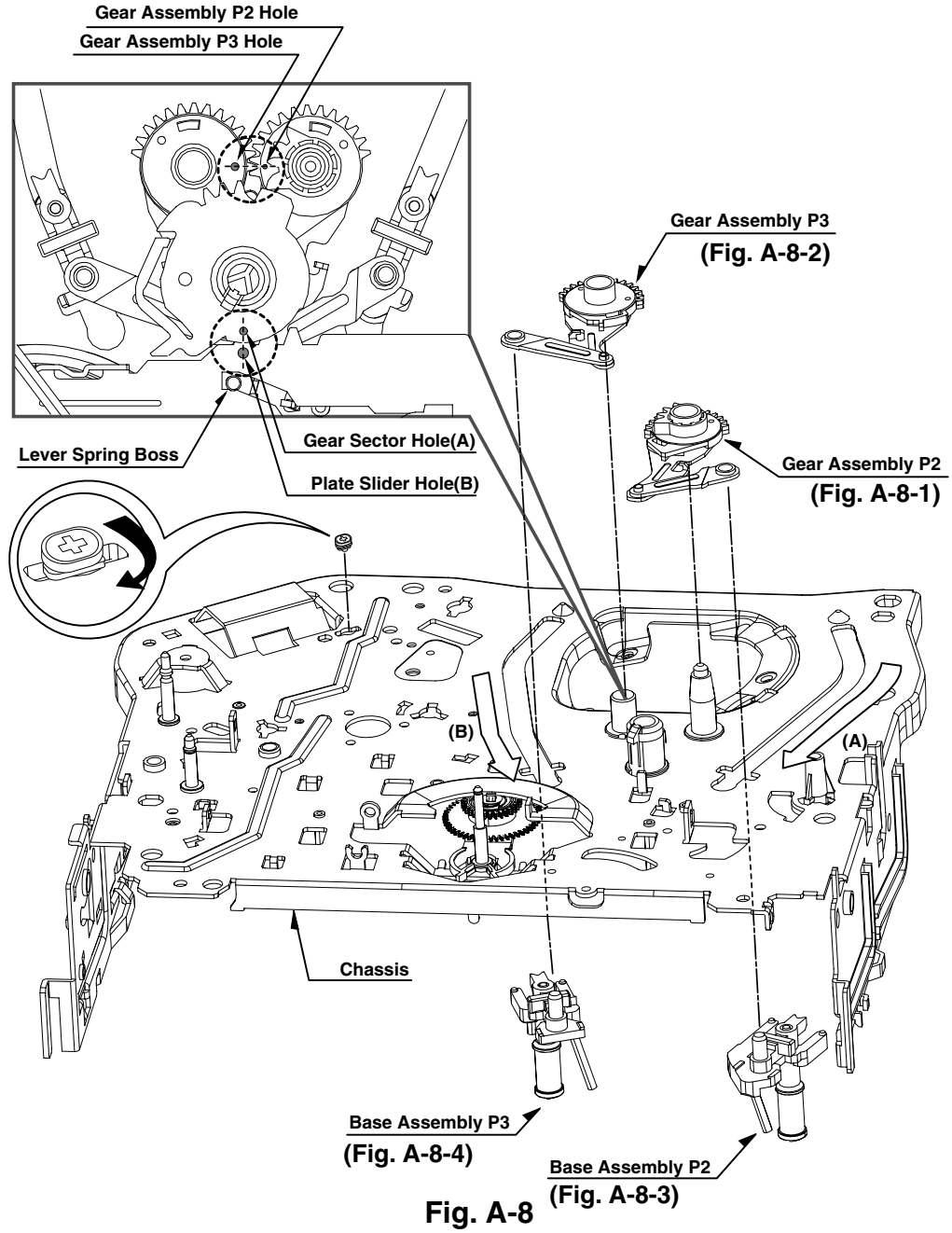


Fig. A-8

29. Gear Assembly P2 (Fig. A-8-1)/ Gear Assembly P3 (Fig. A-8-2)

1) Just lift the Gear Assembly P2 up.
2) Just lift the Gear Assembly P3 up.

NOTE

When reassembling, align the two holes of the Gear Assembly P2 and P3 in a straight line after confirmation whether the Gear Sector Hole(A) and the Plate Slider Hole(B) are aligned or not as Fig.

30. Base Assembly P2 (Fig. A-8-3)/ Base Assembly P3 (Fig. A-8-4)

1) Move the Base Assembly P2 in direction of arrow(A) along the guide hole of the Chassis and disassemble it on bottom side.
2) Move the Base Assembly P3 in direction of arrow(B) along the guide hole of the Chassis and disassemble it on bottom side.

DECK MECHANISM DISASSEMBLY

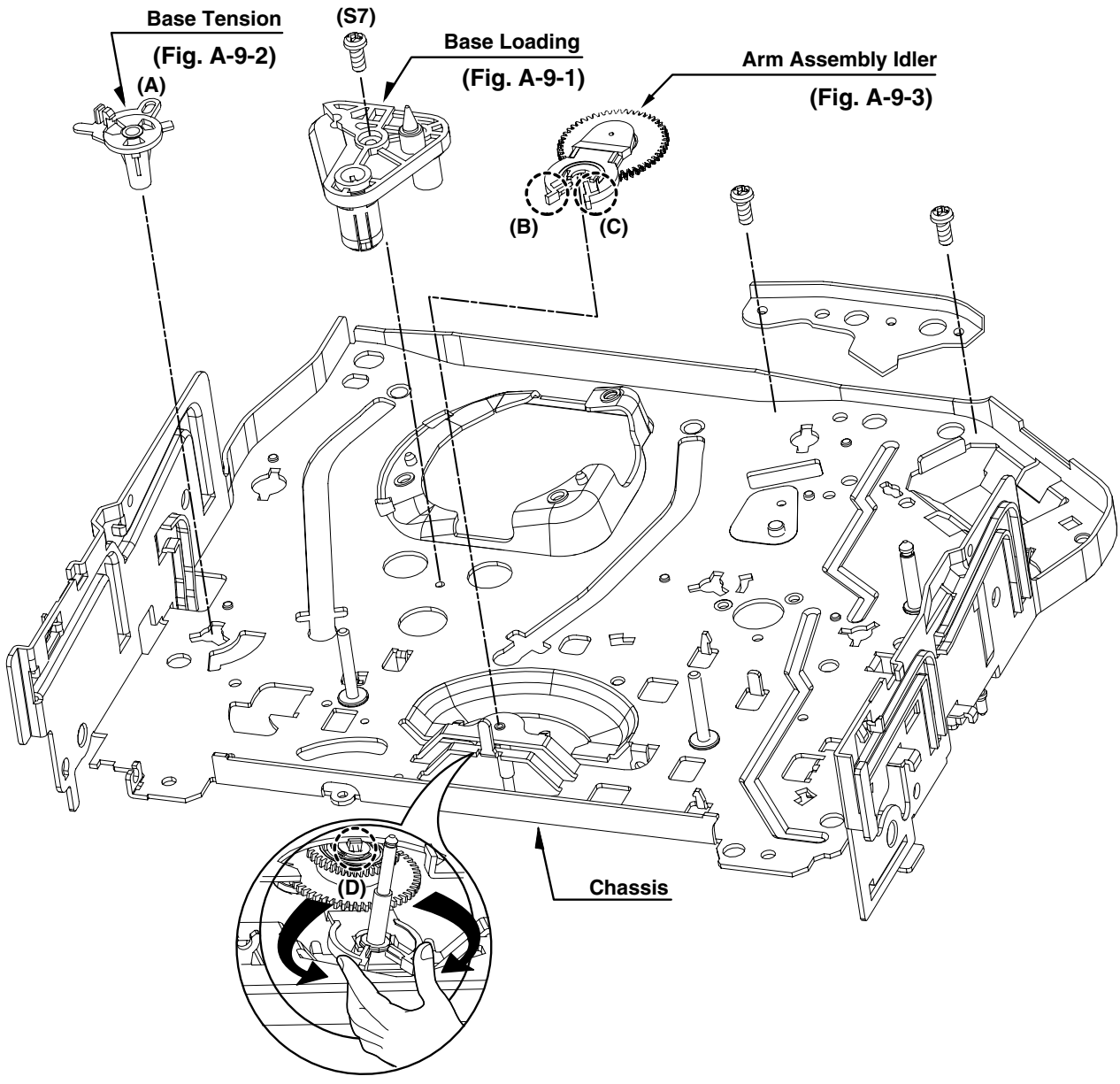


Fig. A-9

31. Base Loading (Fig. A-9-1)

1) Remove the Screw(S7).
2) Lift the Base Loading up.

32. Base Tension (Fig. A-9-2)

1) Breakaway the (A) portion of the Base Tension from the embossing of the Chassis.
2) Turn the Base Tension to counterclockwise direction and lift it up.

33. Arm Assembly Idler (Fig. A-9-3)

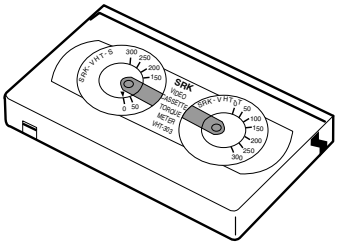
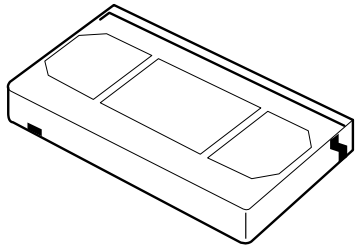
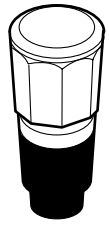
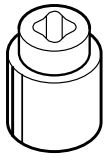
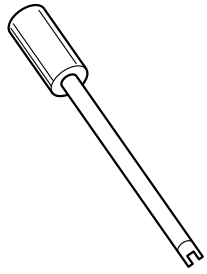
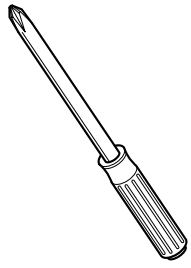
1) Make narrower the two parts, (B) and (C), as Fig. A-9-3.
2) Lift the Arm assembly Idler up.

NOTE

When disassembling, be careful not to be caught the (D) part by the Chassis as Fig.

DECK MECHANISM ADJUSTMENT

• Tools and Fixfures for Service

1. Cassette Torque Meter **SRK-VHT-303(Not SVC part)** **Parts No: D00-D006** 	**2. Alignment Tape** **Parts No NTSC: DTN-001** **PAL:DTN-0002** 	**3. Torque Gauge** **600g.Cm ATG** **Parts No:D00-D002** 
4. Torque Gauge Adaptor **Parts No:D09-R001** 	**5. Post Height Adjusting Driver** **Parts No:DTL-0005** 	**6. + Type Driver (ø 5)** 

DECK MECHANISM ADJUSTMENT

1. Mechanism Alignment Position Check

Purpose:To determine if the Mechanism is in the correct position, when a Tape is ejected.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Check Point
• Blank tape	• Eject Mode (with Cassette ejected)	• Mechanism and Mode Switch Position

1) Turn the Power S/W on and eject the Cassette by pressing the Eject Button.
2) Remove the Top Cover and Plate Assembly Top, visually check if the Gear Cam Hole is aligned with the Chassis Hole as below Fig. C-2.
3) IF not, rotate the Shaft of the Loading Motor to either clockwise or counterclockwise until the alignment is as below Fig. C-2.
4) Remove the Screw which fixes the Deck Mechanism and Main Frame and confirm if the Gear Cam is aligned with the Gear Drive as below Fig. C-1(A).
5) Confirm if the Mode S/W on the Main P.C.Board is aligned as below Fig. C-1(B).
6) Remount the Deck Mechanism on the Main P.C.Board and check each operation.

CHECK DIAGRAM

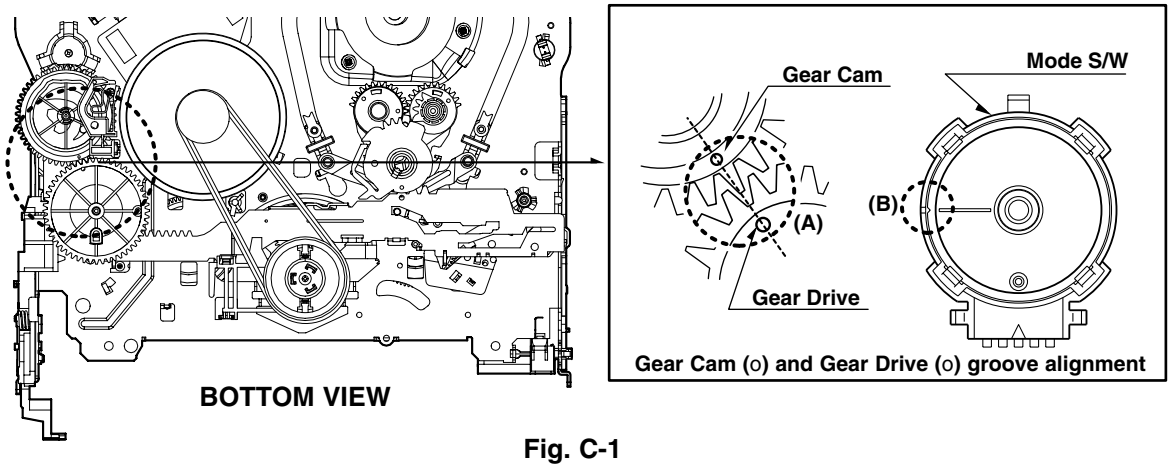


Fig. C-1

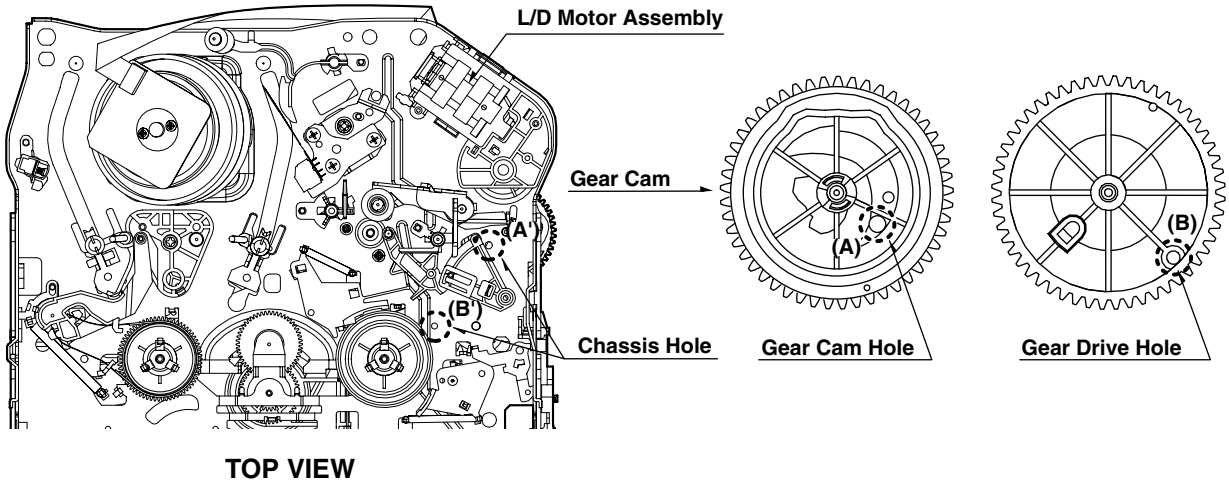


Fig. C-2

DECK MECHANISM ADJUSTMENT

2. Preparation for Adjustment (To set the Deck Mechanism of the loading state without inserting a cassette tape).

1) Unplug the power cord from the AC outlet.
2) Disassemble the Top Cover and Plate Assembly Top.
3) Plug the power cord into the AC outlet.
4) Turn the power S/W on and push the Lever Stopper of the Holder Assembly CST to the back for loading the cassette without tape.
Cover the holes of the End Sensors at the both sides of the Chassis to prevent a light leak.
Then the Deck Mechanism drives to the Stop Mode.
In this case, the Deck Mechanism can accept inputs of each mode, however the Rewind and Review operation can not be performed for more than a few seconds because the Take-up Reel Table is in the Stop State and can not be detected the Reel Pulses.

3. Checking Torque

Purpose: To insure smooth transport of the tape during each mode of operation.
If the tape transport is abnormal, then check the torque as indicated by the chart below.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Checking Method
• Torque Gauge(600g/cm ATG) • Torque Gauge Adaptor • Cassette Torque Meter SRK-VHT-303	• Play (FF) or Review (REW) Mode	• Perform each Deck Mechanism mode without inserting a cassette tape(Refer to above No.2 Preparation for Adjustment). • Read the measurement of the Take-up or Supply Reels on the Cassette Torque Meter(Fig. C-3-2). • Attach the Torque Gauge Adaptor to the Torque Gauge and then read the value of it(Fig. C-3-1).

Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 400g/cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 400g/cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	40~100g/cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	120~210g/cm

NOTE:

The values are measured by using a Torque Gauge and Torque Gauge Adaptor with the Torque Gauge affixed.

NOTE:

The torque reading to measure occurs when the tape abruptly changes direction from Fast Forward to Rewind Mode, when quick braking is applied to both Reels.

• Torque Gauge (600g.cm ATG)

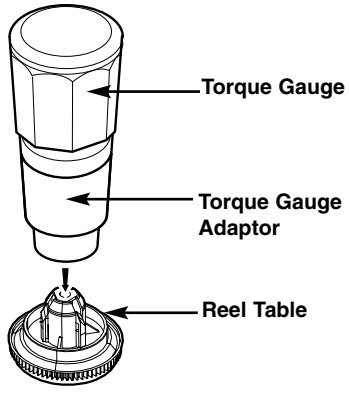


Fig. C-3-1

• Cassette Torque Meter (SRK-VHT-303)

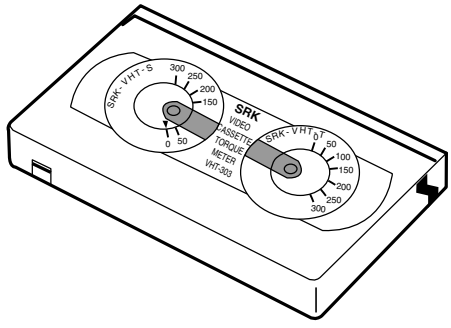


Fig. C-3-2

DECK MECHANISM ADJUSTMENT

4.Guide Roller Height Adjustment

Purpose: To regulate the height of the tape so that the bottom of the tape runs along the tape guide line on the Lower Drum.

4-1. Preliminary Adjustment

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Post Height Adjusting Driver	• Play or Review Mode	• Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.

Adjustment Procedure

1) Confirm if the tape runs along the tape guide line of the Lower Drum.
2) If the tape runs the bottom of the guide line, turn the Guide Roller Height Adjustment Screw to clockwise direction.
3) If it runs the top, turn to counterclockwise direction.
4) Adjust the height of the Guide Roller to be guided to the guide line of the Lower Drum from the starting and ending point of the Drum.

ADJUSTMENT DIAGRAM

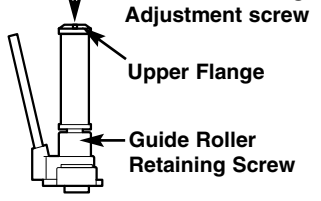


Fig. C-4-1

4-2. Precise Adjustment

Test Equipment/Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Point
• Oscilloscope • Alignment Tape • Post Height Adjusting Driver	• CH-1:PB RF Envelope • CH-2:NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Point • RF Envelope Output Point	• Play an Alignment Tape	• Guide Roller Height Adjustment Screws

Adjustment Procedure

1) Play an Alignment Tape after connecting the probe of the Oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.
2) Tracking Control(in PB Mode) : Center Position(When this adjustment is performed after the Drum Assembly has been replaced, set the Tracking Control so that the RF Output is Maximum).
3) Height Adjustment Screw : Flatten the RF waveform. (Fig. C-4-2)
4) Turn(Move) the Tracking Control(in PB Mode) clockwise and counterclockwise.(Fig. C-4-3)
5) Check that any drop of RF Output is uniform at the start and end of the waveform.

NOTE

If the adjustment is excessive or insufficient the tape will jam or fold.

Waveform Diagrams

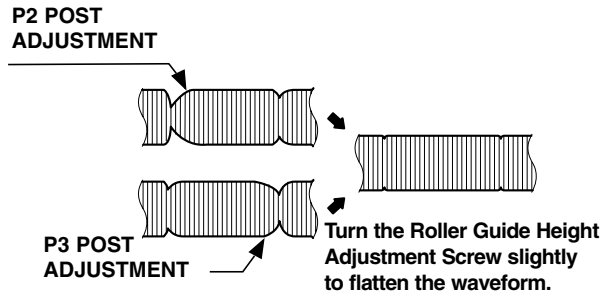


Fig. C-4-2

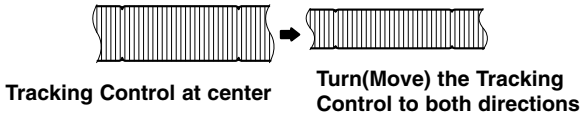
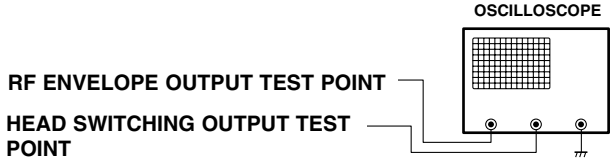


Fig. C-4-3

Connection Diagram



DECK MECHANISM ADJUSTMENT

5. Audio/Control (A/C) Head Adjustment

Purpose: To insure that the tape passes accurately over the Audio and Control Tracks in exact alignment of the both Record and Playback Modes.

5-1. Preliminary Adjustment (Height and Tilt Adjustment)
Perform the Preliminary Adjustment, when there is no Audio Output Signal with the Alignment Tape.

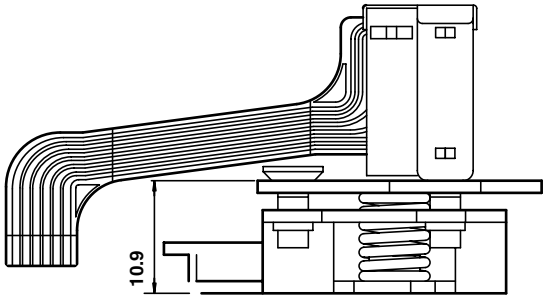
Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Blank Tape • Screw Driver(+) Type 5mm	• Play the blank tape	• Tilt Adjustment Screw(C) • Height Adjustment Screw(B) • Azimuth Adjustment Screw(A)

Adjustment Procedure/Diagrams

1) Initially adjust the Base Assembly A/C Head as shown Fig. C-5-1 by using the Height Adjustment Screw(B).
2) Play a blank tape and observe if the tape passes accurately over the A/C Head without tape curling or folding.
3) If folding or curling is occured then adjust the Tilt Adjustment Screw(C) while the tape is running to resemble Fig. C-5-3.
4) Reconfirm the tape path after Playback about 4~5 seconds.

NOTE

Ideal A/C head height occurs when the tape runs between 0.2~0.25mm above the bottom edge of the A/C Head core.



A/C Head Base

Fig. C-5-1

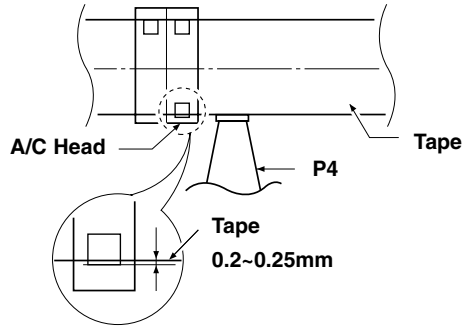
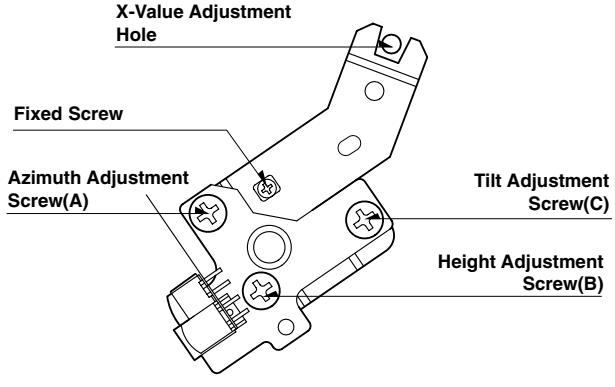


Fig. C-5-3



A/C Head Assembly

Fig. C-5-2

5-2. Confirm that the tape passes smoothly between the Take-up Guide and Pinch Roller(using a mirror or the naked eye).

1) After completing Step 5-1.(Preliminary Adjustment), check that the tape passes around the Take-up Guide and Pinch Roller without folding or curling at the top or bottom.
   (1) If folding or curling is observed at the bottom of the Take-up Guide then slowly turn the Tilt Adjustment Screw(C) in the clockwise direction.
   (2) If folding or curling is observed at the top of it then slowly turn the Tilt Adjustment Screw(C) in the counterclockwise direction.

NOTE:

Check the RF envelope after adjusting the A/C Head, if the RF waveform differs from Fig. C-5-4, performs Precise Adjustment to flat the RF waveform.

5-3. Precise Adjustment (Azimuth adjustment)

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment Tape(SP) • Screw Driver(+) Type 5mm	• Audio output jack	• Play an Alignment Tape 1KHz, 7KHz Sections	• Azimuth Adjustment Screw(A) • Height Adjustment Screw(B)

Adjustment Procedure

1) Connect the probe of the oscilloscope to Audio Output Jack.
2) Alternately adjust the Azimuth Adjustment Screw(A) and the Tilt Adjustment Screw(C) for maximum output of the 1KHz and 7KHz segments, while maintaining the flattest envelope differential between the two frequencies.

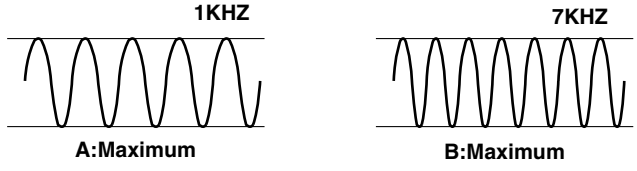
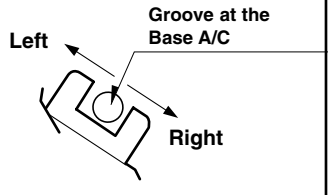


Fig. C-5-4

6. X-Value Adjustment

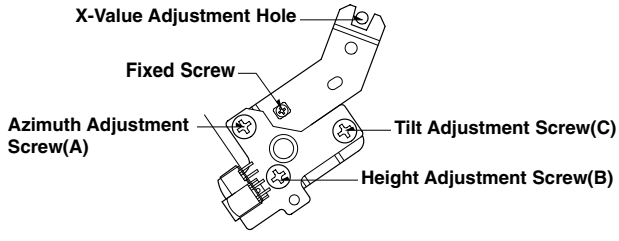
Purpose: To obtain compatibility with the other VCR(VCP) Models.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment Tape(SP only) • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play an Alignment Tape	

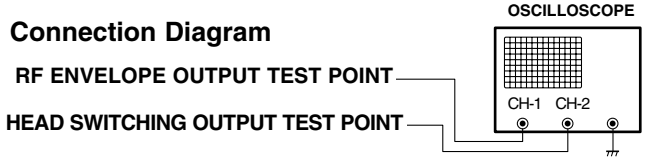
Adjustment Procedure

1) Release the Automatic Tracking to run long enough for tracking to complete it's cycle.
2) Loosen the Fixed Mounting Screw and move the Base Assembly A/C Head in the direction as shown in the diagram to find the center of the peak that allows for the maximum waveform envelope.
   This method should allow the 31µm Head to be centrally located over the 58µm tape track.
3) Tighten the Base Assembly A/C Head mounting Screw.

Adjustment Diagram



Connection Diagram



DECK MECHANISM ADJUSTMENT

7. Adjustment after Replacing Drum Assembly (Video Heads)

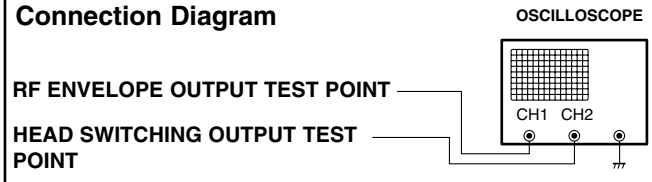
Purpose: To correct for shift in the Roller Guide and X value after replacing the Drum.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Points
• Oscilloscope • Alignment Tapes • Blank Tape • Post Height Adjusting Driver • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play the Blank Tape • Play an Alignment Tape	• Guide Roller Precise Adjustment • Switching Point • Tracking Preset • X-Value

Checking/Adjustment Procedure

Play a blank tape and check for tape curling or creasing around the Roller Guide. If there is a problem then follow the procedure 4. "Guide Roller Height" and 5. "Audio Control(A/C) Head Adjustment".

Connection Diagram



Waveform

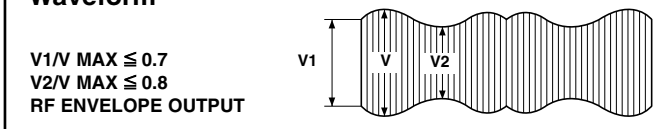


Fig. C-7

8. Check the Tape Travel after Reassembling Deck Assembly.

8-1. Checking Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment/ Fixture	Specification	Connection Points	Test Conditions (Mechanism Condition)
• Oscilloscope • Alignment Tapes(with 6H 3KHz Color Bar Signal) • Stop Watch	• RF Locking Time: Less than 5 sec. • Audio Locking Time:Less than 10sec	• CH-1: PB RF Envelope • CH-2: Audio Output • RF Envelope Output Point • Audio Output Jack	• Play an Alignment Tape (with 6H 3kHz Color Bar Signal)

Checking Procedure

Play an Alignment Tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.

NOTES:

1) CUE is the forward search mode
2) REV is the backward search mode
3) Refer to the Play mede

8-2. Checking for tape curling or jamming

Test Equipment/ Fixture	Specification	Test Conditions (Mechanism Condition)
• T-160 Tape • T-120 Tape	• Be sure there is no tape jamming or curling at the begining, middle or end of the tape.	• Run the CUE, REV, Play mode at the beginning and the end of the tape.

Checking Procedure

1) Confirm that the tape runs smoothly around the roller guides, Drum and A/C Head Assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the begining, middle and end sections of the tape.
2) Confirm that the tape passes over the A/C Head Assembly as indicated by proper audio reproduction and proper tape counter performance.

1. Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit.
Check with the customer to find out how often the unit is used, and then determine that the unit is ready for inspection and maintenance. Check the following parts.

Phenomenon	Inspection	Replacement	
Color beats	Dirt on Full-Erase Head	o	F/E Head
Poor S/N, no color	Dirt on Video Head	o	Video Head
Vertical or Horizontal jitter	Dirt on Video Head Dirt on tape transport system	o	
Low volume, Sound distorted	Dirt on Audio/Control Head	o	A/C Head
Tape does not run. Tape is slack	Dirt on Pinch Roller	o	Pinch Roller Belt Capston
In Review and Unloading (off mode), the tape is rolled up loosely.	Clutch Assembly D35 torque reduced	o	Clutch Assembly D35
	Cleaning Drum and transport system	Fig. C-9-3	

NOTE

If locations marked with **o** do not operate normally after cleaning, check for wear and replace.
See the EXPLODED VIEWS at the end of this manual as well as the above illustrations and see the Greasing (Page 4-21, 22) for the sections to be lubricated and greased.

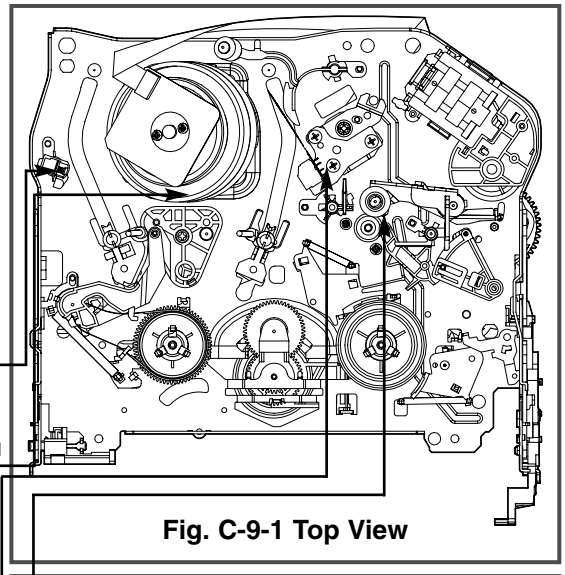


Fig. C-9-1 Top View

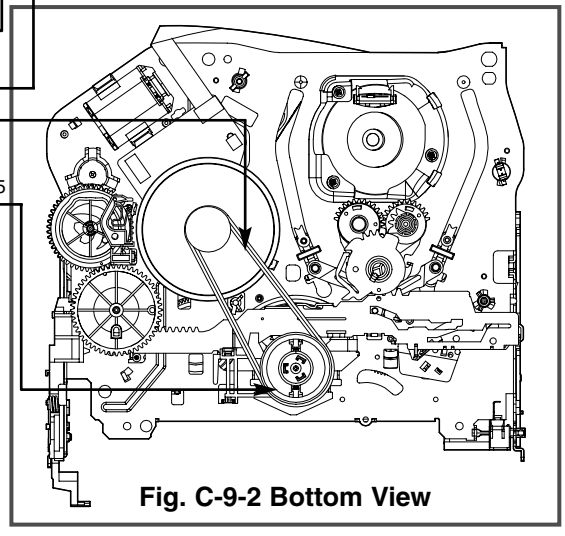


Fig. C-9-2 Bottom View

*** No. (1)~(12) Indicates the Tape Path to be traveled from Supply Reel to Take-up Reel.**

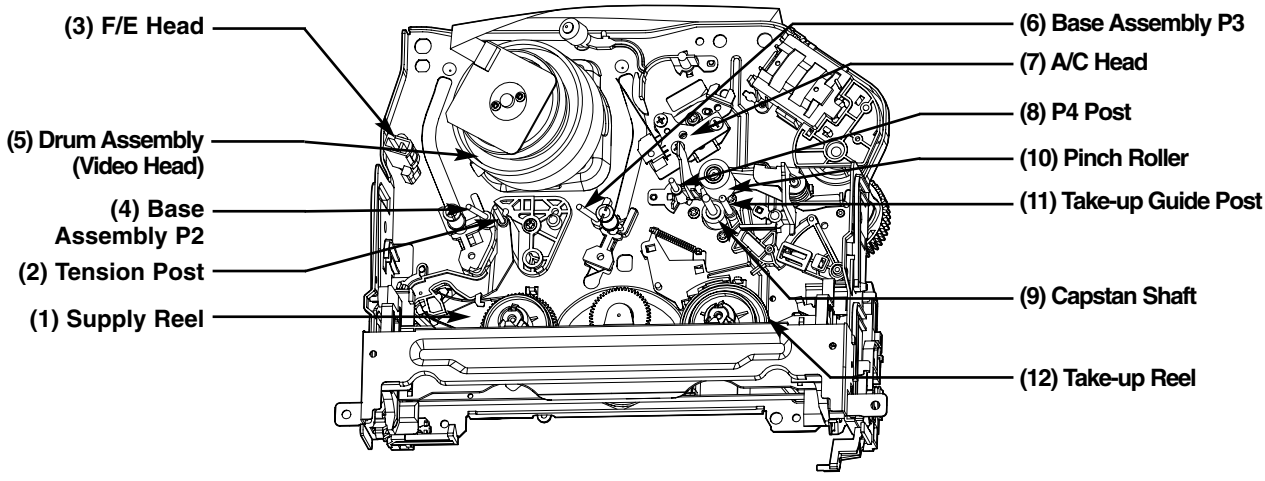


Fig. C-9-3 Tape Transport System

2. Required Maintenance

The recording density of a VCR(VCP) is much higher than that of an audio tape recorder. VCR(VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatibility with the other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

3. Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR(VCP), and the environment in which the VCR(VCP) is used.
But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	■	■	■
Two hours	■	■	
Three hours	■		

4. Supplies Required for Inspection and Maintence

(1) Grease : Kanto G-311G (Blue) or equivalent
(2) Isopropyl Alcohol or equivalent
(3) Cleaning Patches
(4) Grease : Kanto G-381(Yellow)

5. Maintenance Procedure

5-1) Cleaning

(1) Cleaning video head
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left.
(Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.)
Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isopropyl Alcohol.

NOTES:

① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
② Make sure that during cleaning you do not touch the tape transport system with excessive force that would cause deformation or damage to the system.

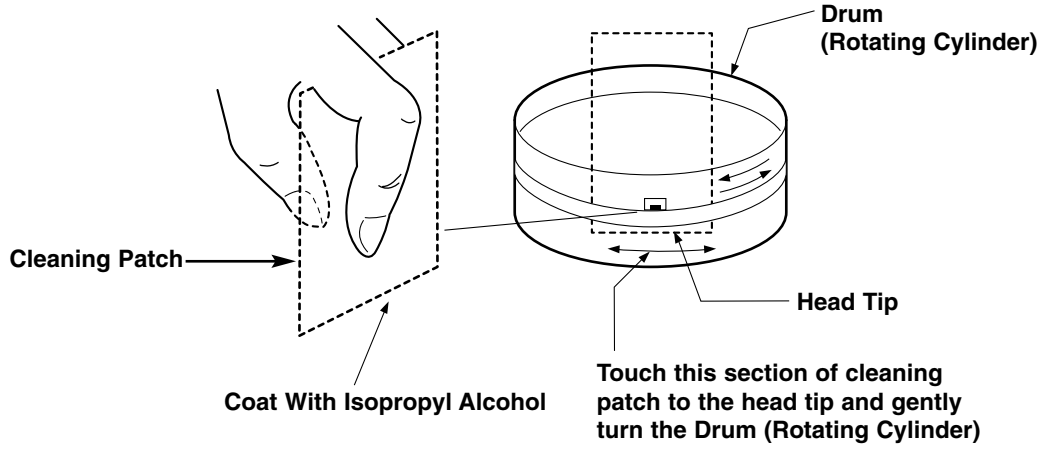

Drum
(Rotating Cylinder)
Cleaning Patch
Head Tip
Coat With Isopropyl Alcohol
Touch this section of cleaning patch to the head tip and gently turn the Drum (Rotating Cylinder)

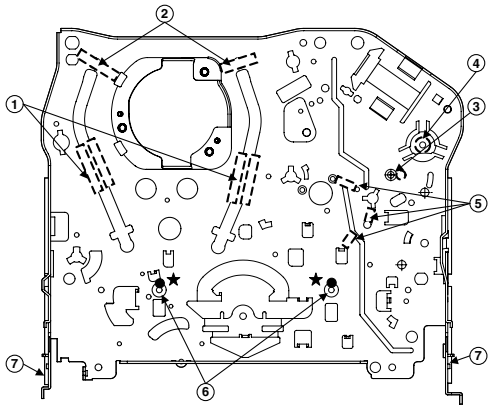
Fig. C-9-4

5-2) Greasing

(1) Greasing guidelines
Apply grease, with a cleaning patch. Do not use excessive grease. It may come into contact with the tape transport or drive system. Wipe excessive grease and clean with cleaning patch wetted in Isopropyl Alcohol.

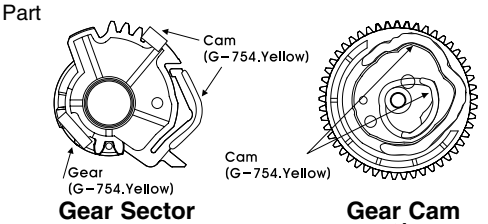
NOTE:Greasing Points

1) Loading Path Inside & Top side
2) Base Assembly P2, P3 stopper
3) Shaft
4) L/D Motor Gear Wheel Part
5) Arm Take-up Rubbing Sections
6)Reel S,T shaft(G381:Yellow)
7) Arm Assembly F/L Rotating Sections

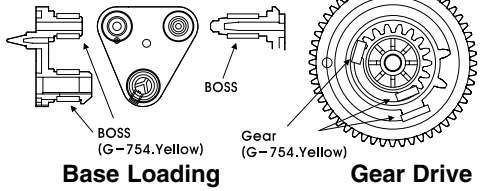


Chassis (Top)

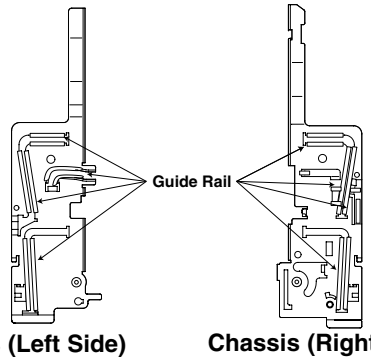
Gear Part



Gear Sector **Gear Cam**



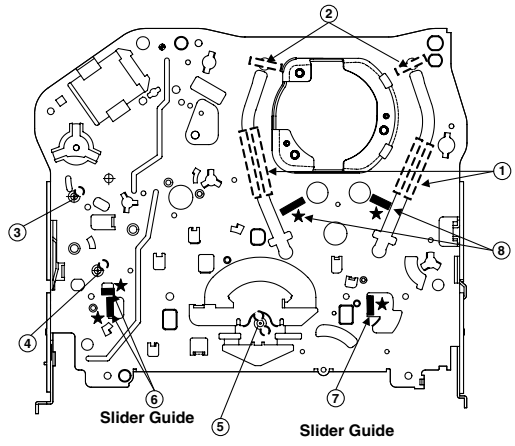
Base Loading **Gear Drive**



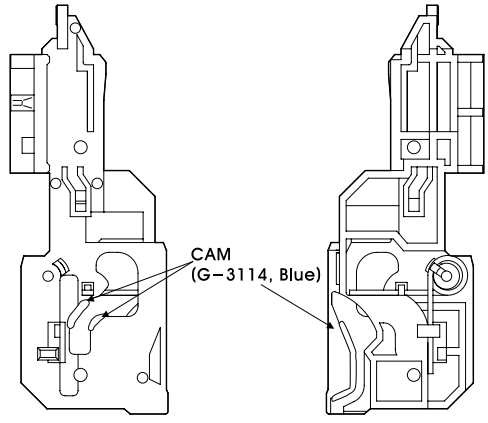
Chassis (Left Side) **Chassis (Right Side)**

(2) Periodic greasing
Grease specified locations every 5,000 hours.

1) Loading Path Inside & Top side
2) Base Assembly P2,P3 stopper
3) Shaft
4) Shaft
5) Clutch Assembly D35 Shaft
6) Plate Slider Guide Sections
7) Plate Slider Guide Sections
8) Gear Assembly P2, P2 Rubbing Sections



Chassis (Bottom)



Gear Rack F/L

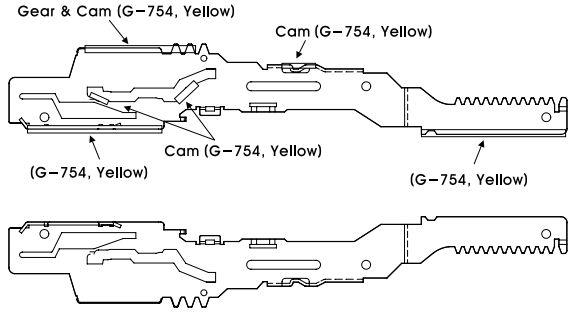
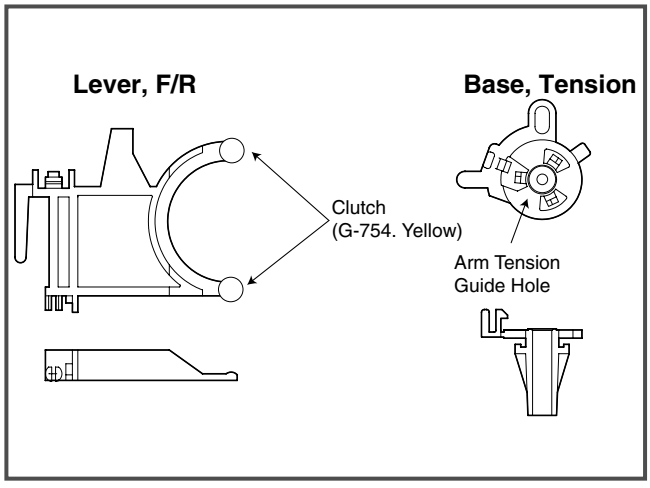
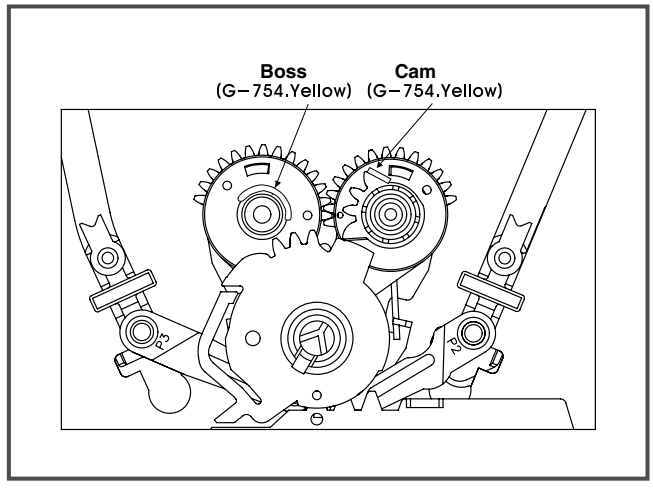


Plate Slider

Lever, F/R, Base, Tension



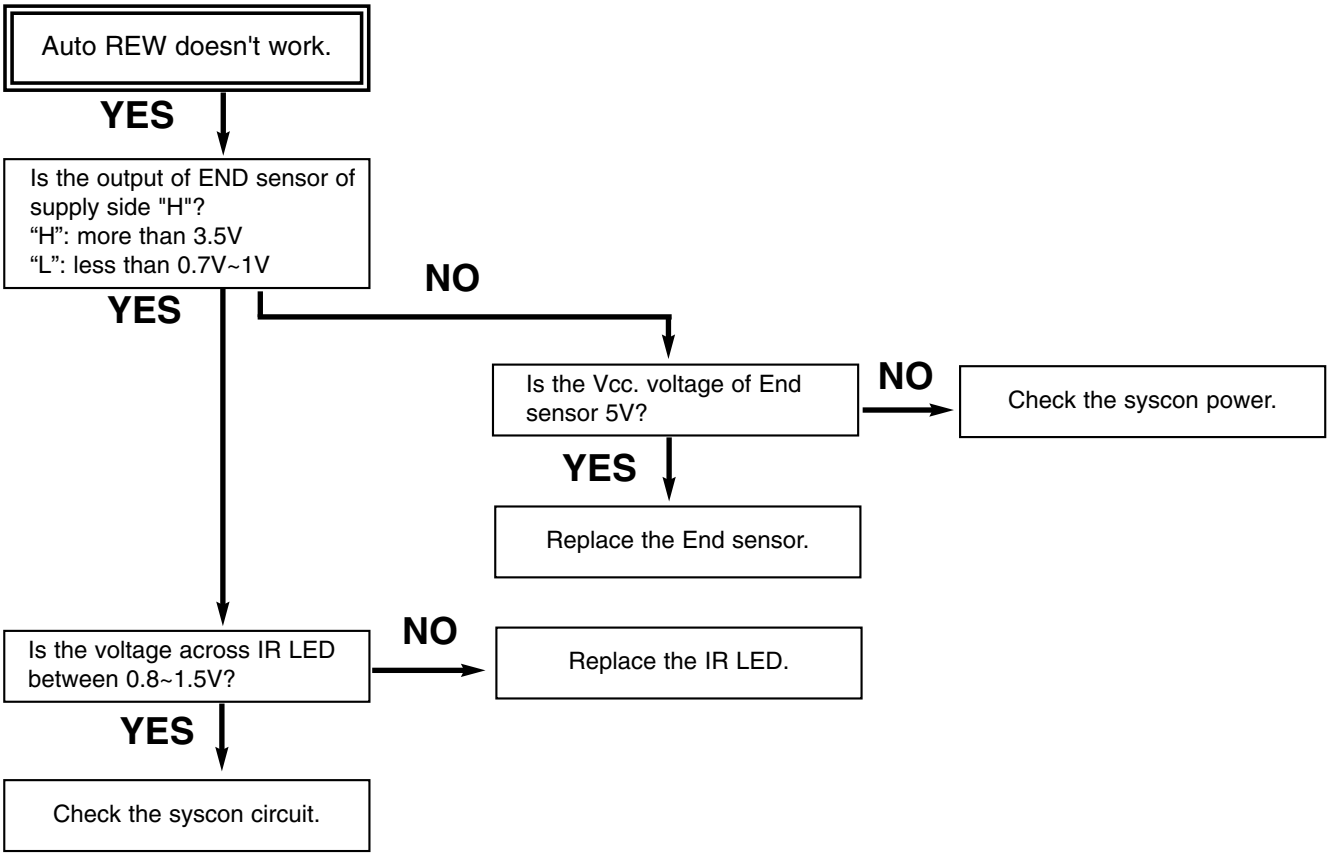
GEAR AY, P2 & P3



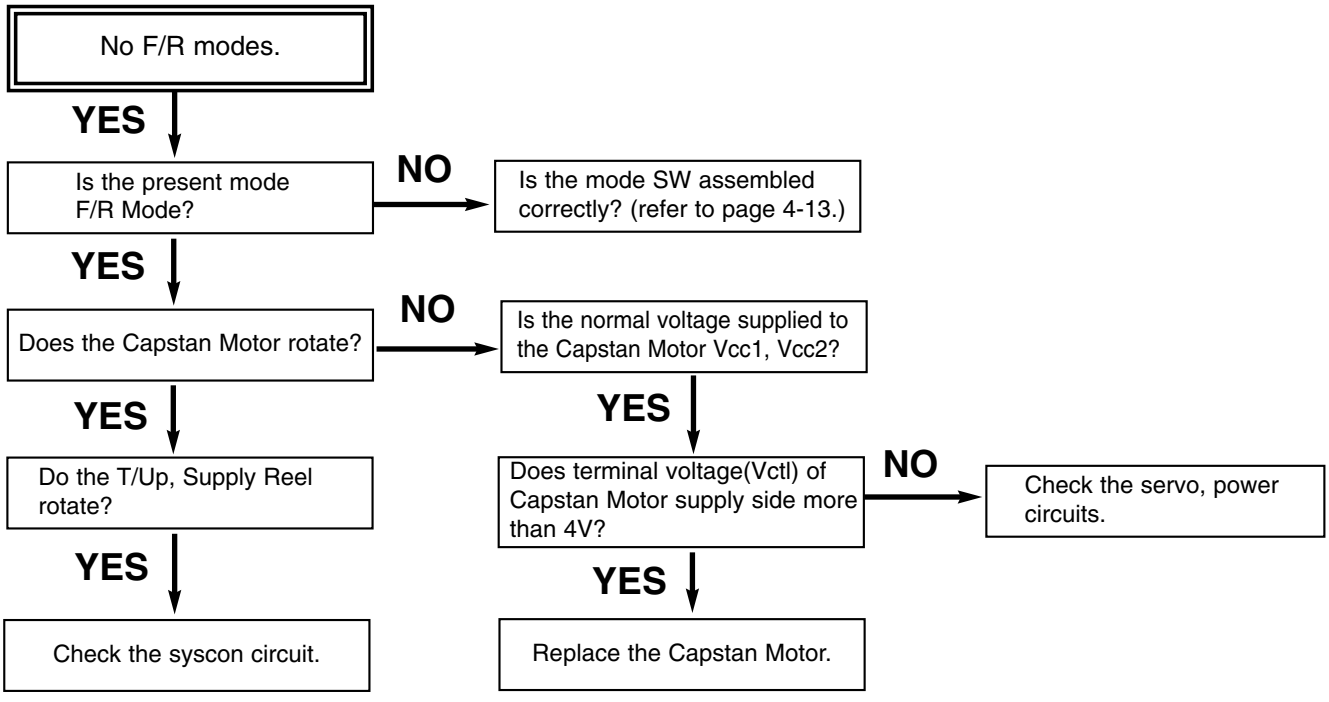
MECHANISM TROUBLESHOOTING GUIDE

1.Deck Mechanism

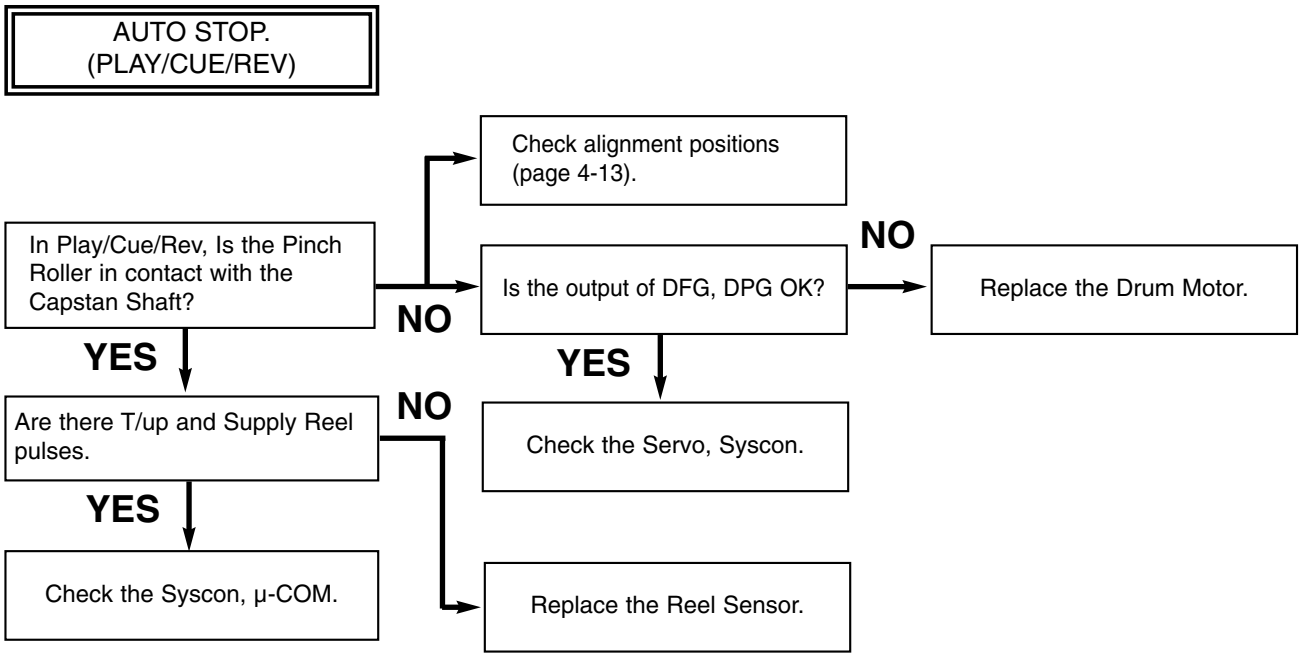
A.



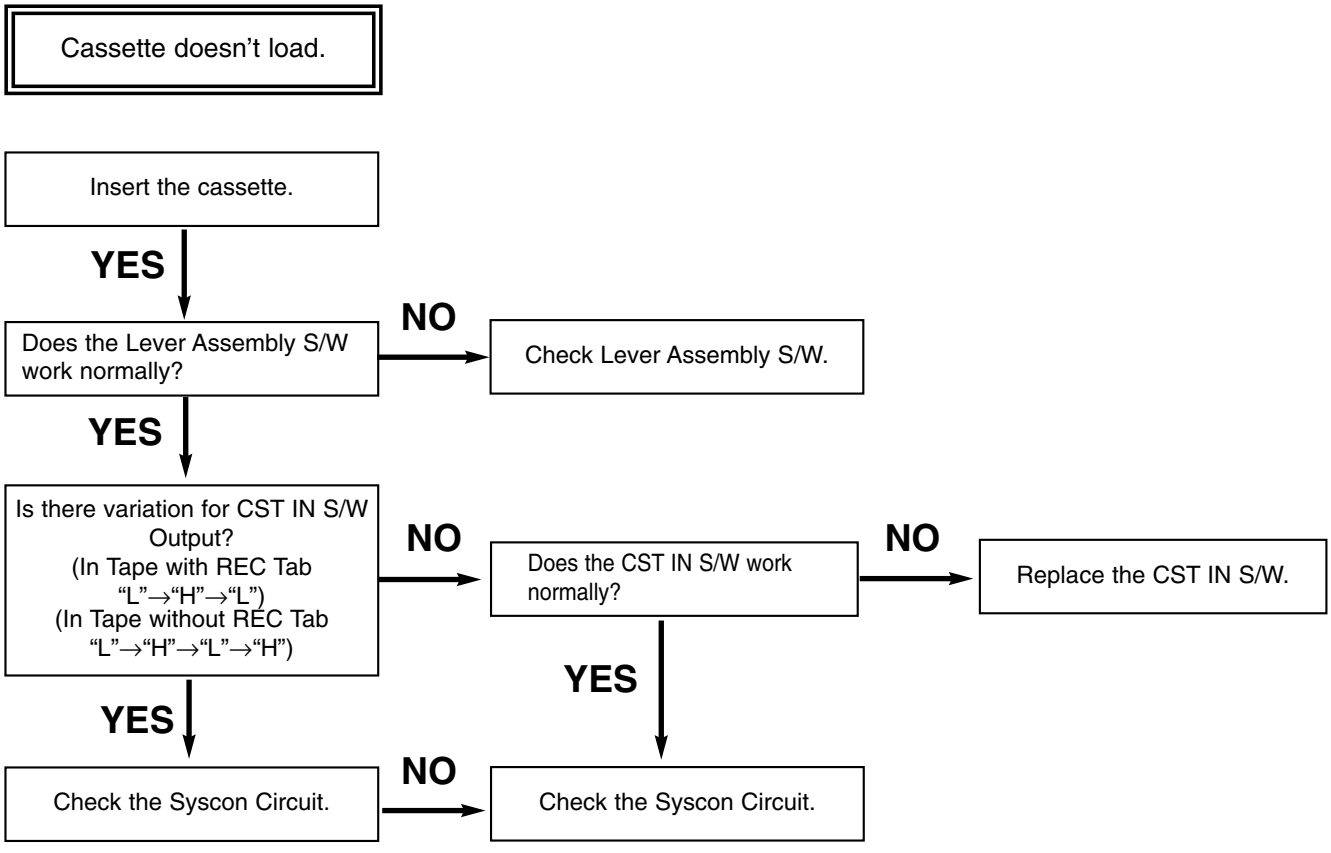
B.



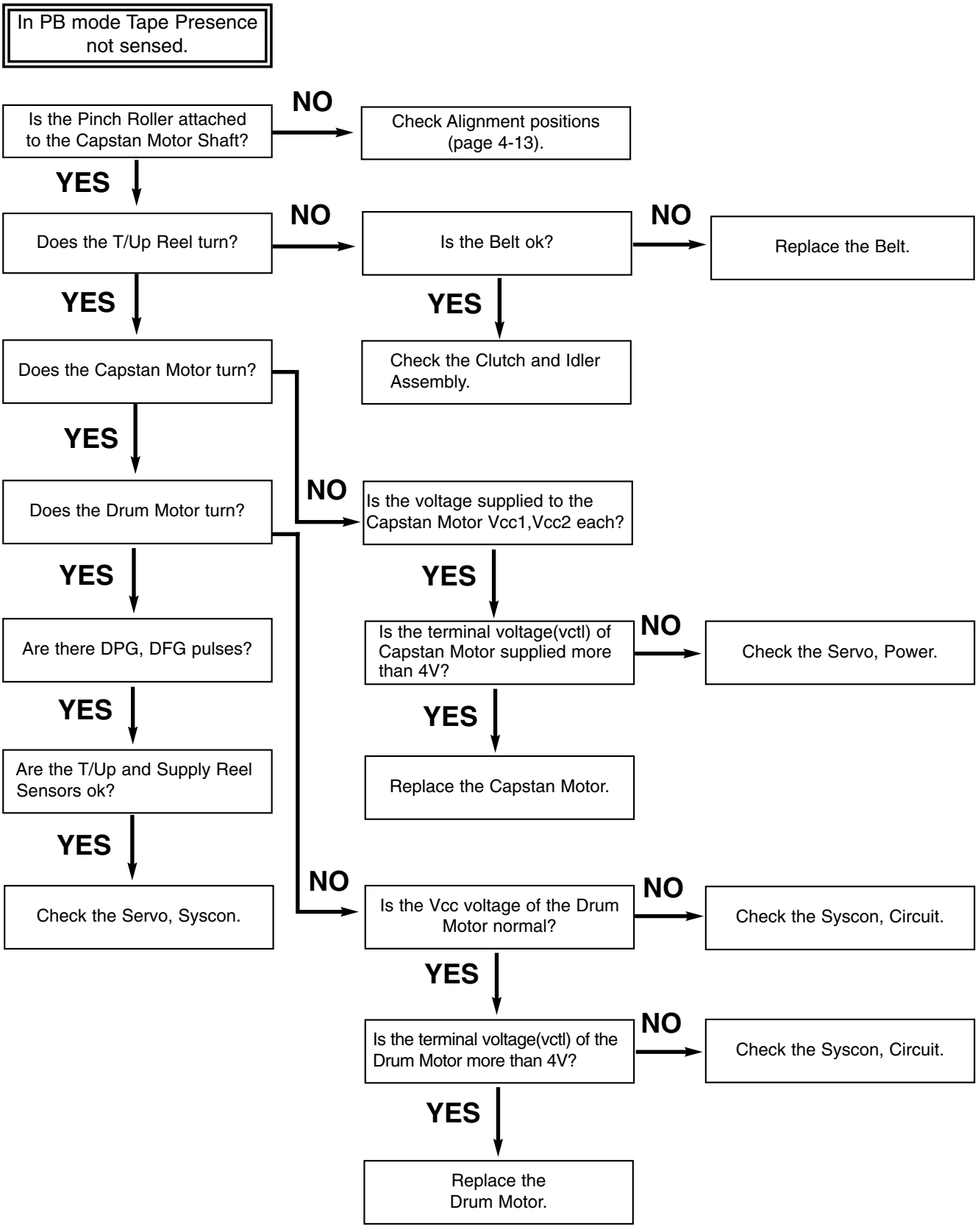
C.


AUTO STOP.
(PLAY/CUE/REV)
In Play/Cue/Rev, Is the Pinch Roller in contact with the Capstan Shaft?
NO
Check alignment positions (page 4-13).
Is the output of DFG, DPG OK?
NO
Replace the Drum Motor.
YES
YES
Are there T/up and Supply Reel pulses.
NO
Check the Servo, Syscon.
YES
Check the Syscon, µ-COM.
Replace the Reel Sensor.

D.

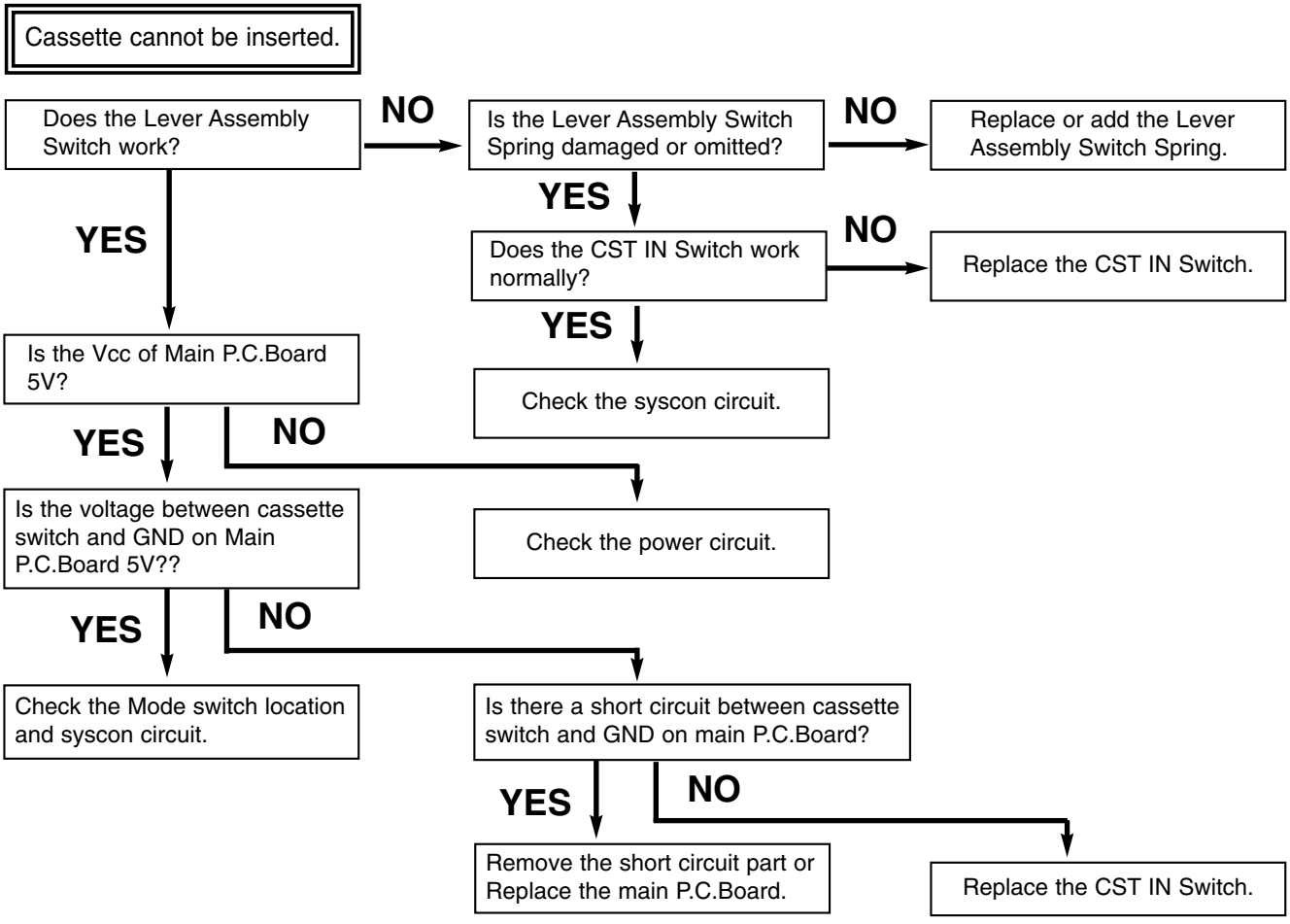

Cassette doesn't load.
Insert the cassette.
YES
Does the Lever Assembly S/W work normally?
NO
Check Lever Assembly S/W.
YES
Is there variation for CST IN S/W Output?
(In Tape with REC Tab
"L"→"H"→"L")
(In Tape without REC Tab
"L"→"H"→"L"→"H")
NO
Does the CST IN S/W work normally?
NO
Replace the CST IN S/W.
YES
YES
Check the Syscon Circuit.
NO
Check the Syscon Circuit.

E.

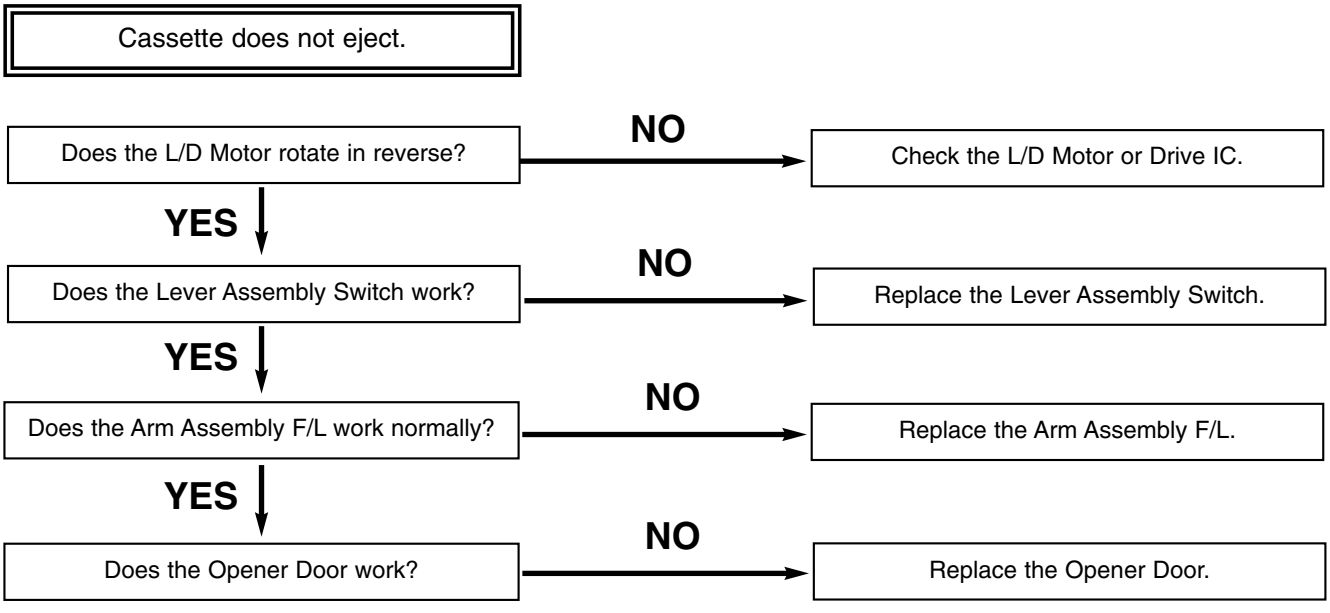

In PB mode Tape Presence not sensed.
Is the Pinch Roller attached to the Capstan Motor Shaft?
NO
Check Alignment positions (page 4-13).
YES
Does the T/Up Reel turn?
NO
Is the Belt ok?
NO
Replace the Belt.
YES
YES
Check the Clutch and Idler Assembly.
Does the Capstan Motor turn?
YES
Does the Drum Motor turn?
NO
Is the voltage supplied to the Capstan Motor Vcc1,Vcc2 each?
YES
YES
Are there DPG, DFG pulses?
Is the terminal voltage(vctl) of Capstan Motor supplied more than 4V?
NO
Check the Servo, Power.
YES
YES
Are the T/Up and Supply Reel Sensors ok?
Replace the Capstan Motor.
YES
NO
Check the Servo, Syscon.
Is the Vcc voltage of the Drum Motor normal?
NO
Check the Syscon, Circuit.
YES
Is the terminal voltage(vctl) of the Drum Motor more than 4V?
NO
Check the Syscon, Circuit.
YES
Replace the Drum Motor.

2. Front Loading Mechanism

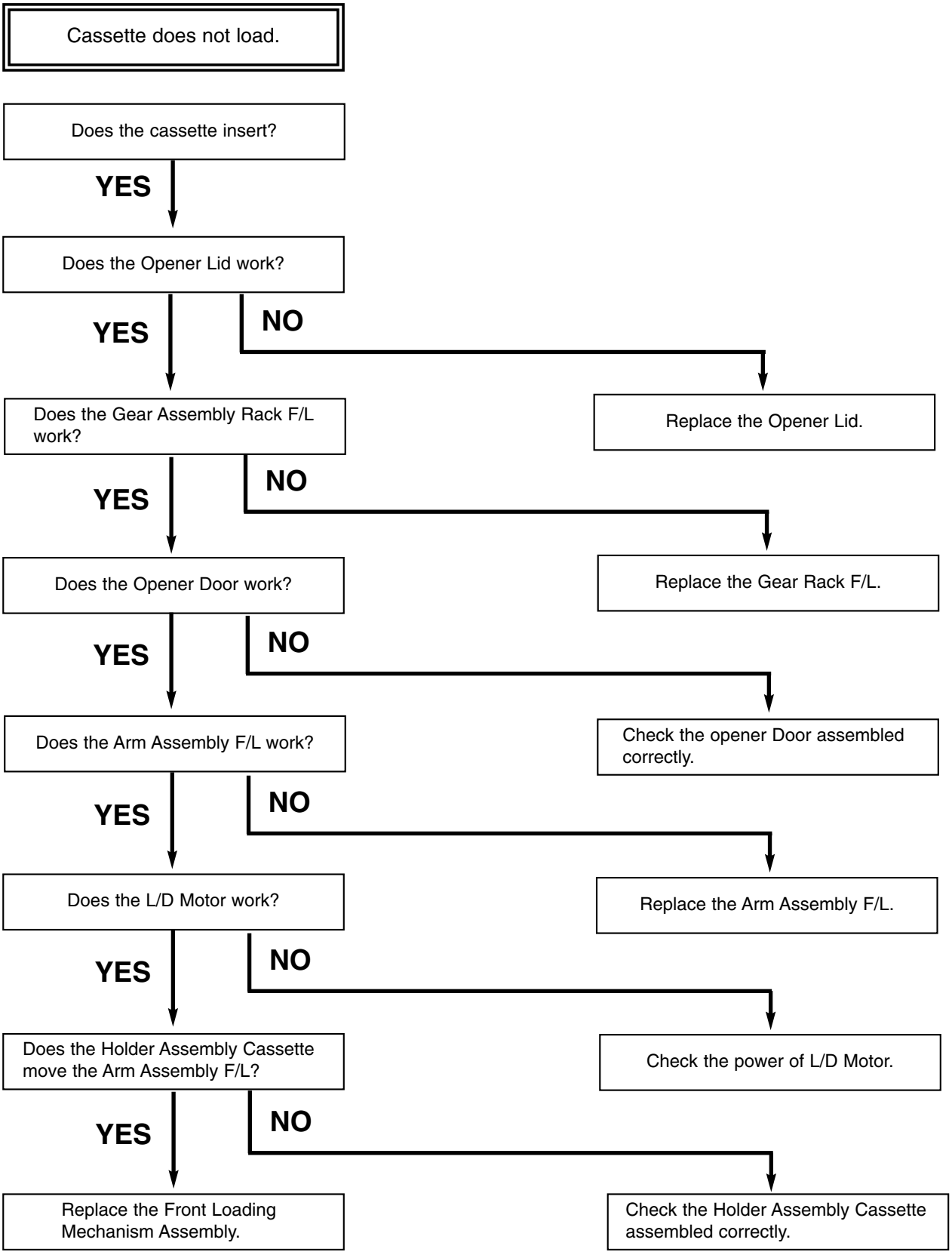
A.


Cassette cannot be inserted.
Does the Lever Assembly Switch work?
NO
Is the Lever Assembly Switch Spring damaged or omitted?
NO
Replace or add the Lever Assembly Switch Spring.
YES
YES
Does the CST IN Switch work normally?
NO
Replace the CST IN Switch.
YES
Is the Vcc of Main P.C.Board 5V?
Check the syscon circuit.
YES
NO
Is the voltage between cassette switch and GND on Main P.C.Board 5V??
Check the power circuit.
YES
NO
Check the Mode switch location and syscon circuit.
Is there a short circuit between cassette switch and GND on main P.C.Board?
YES
NO
Remove the short circuit part or Replace the main P.C.Board.
Replace the CST IN Switch.

B.

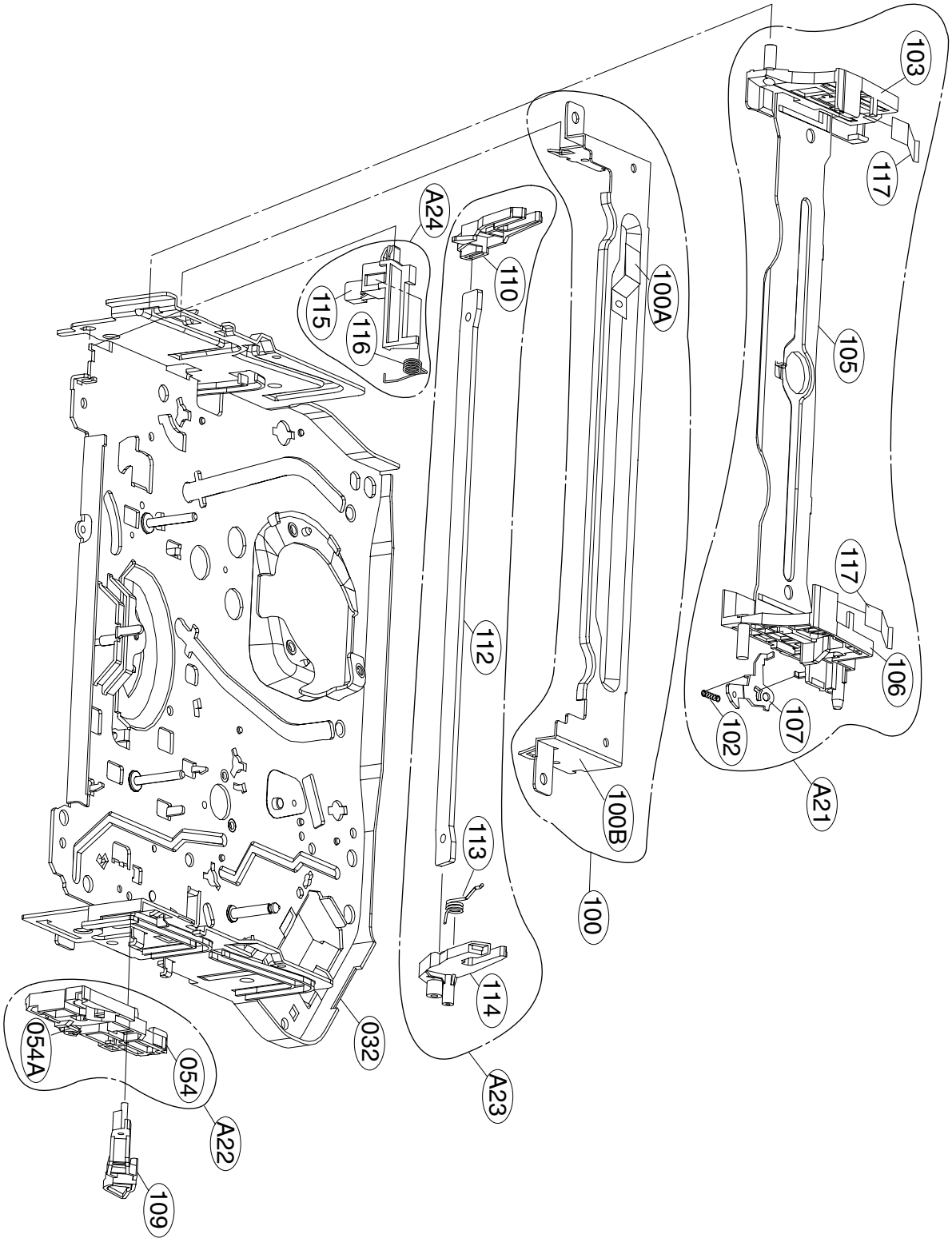


C.


Cassette does not load.
Does the cassette insert?
YES
Does the Opener Lid work?
YES
NO
Replace the Opener Lid.
Does the Gear Assembly Rack F/L work?
YES
NO
Replace the Gear Rack F/L.
Does the Opener Door work?
YES
NO
Check the opener Door assembled correctly.
Does the Arm Assembly F/L work?
YES
NO
Replace the Arm Assembly F/L.
Does the L/D Motor work?
YES
NO
Check the power of L/D Motor.
Does the Holder Assembly Cassette move the Arm Assembly F/L?
YES
NO
Check the Holder Assembly Cassette assembled correctly.
Replace the Front Loading Mechanism Assembly.

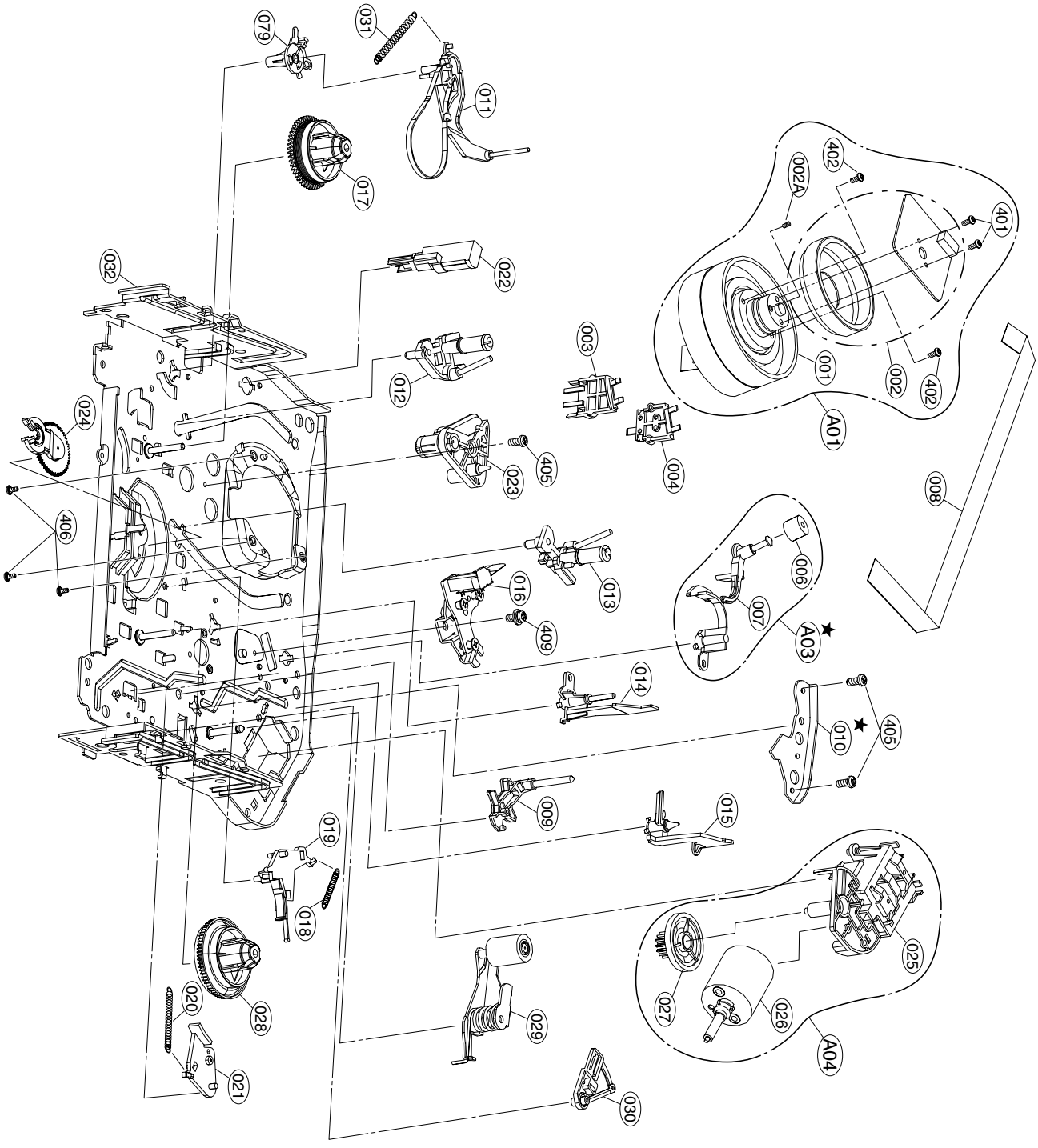
EXPLODED VIEWS

1. Front Loading Mechanism Section



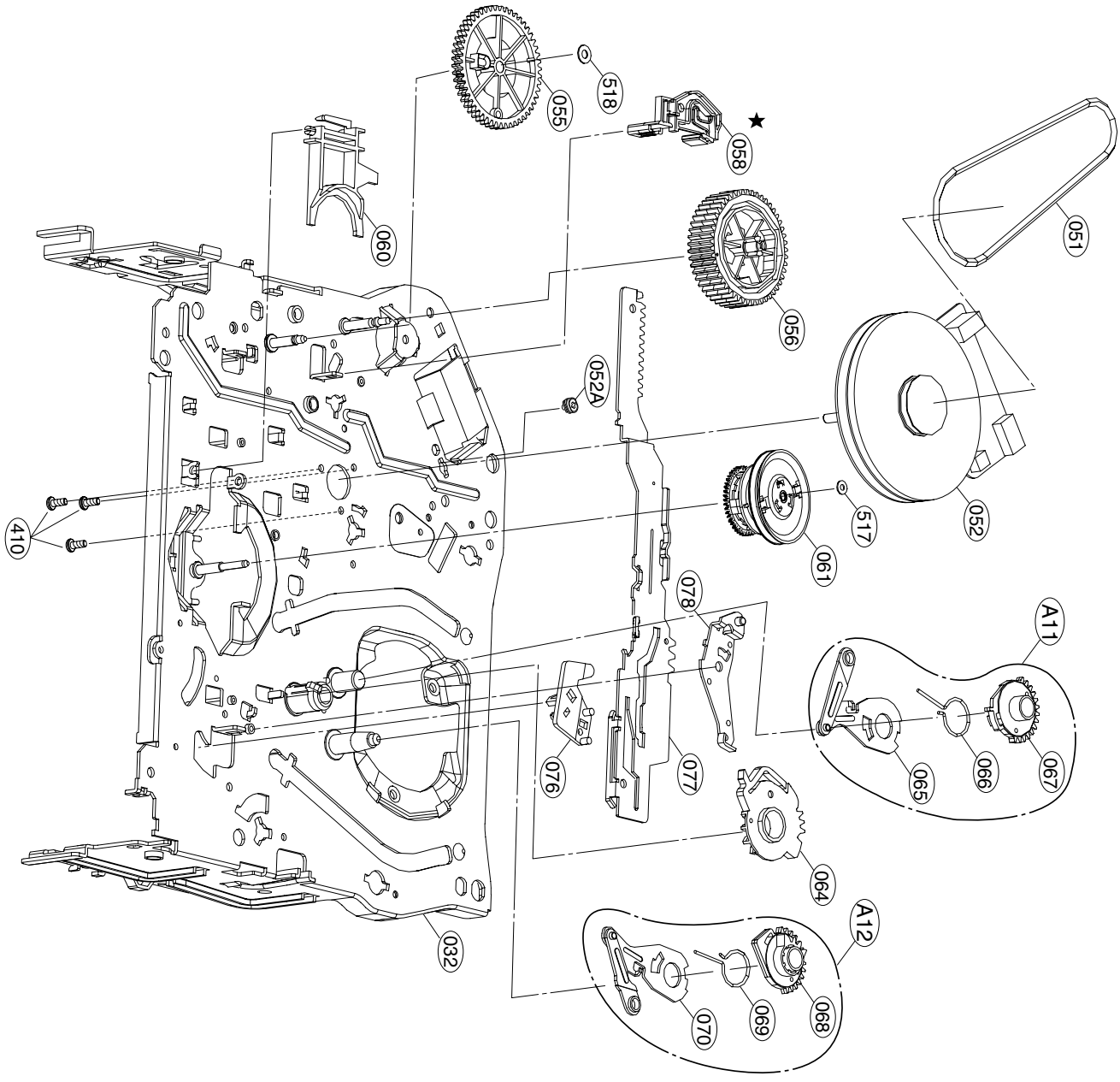
2. Moving Mechanism Section(1)

★ OPTIONAL PART



3. Moving Mechanism Section(2)

★ OPTIONAL PART



MEMO

SECTION 5 MECHANISM OF DVD PART

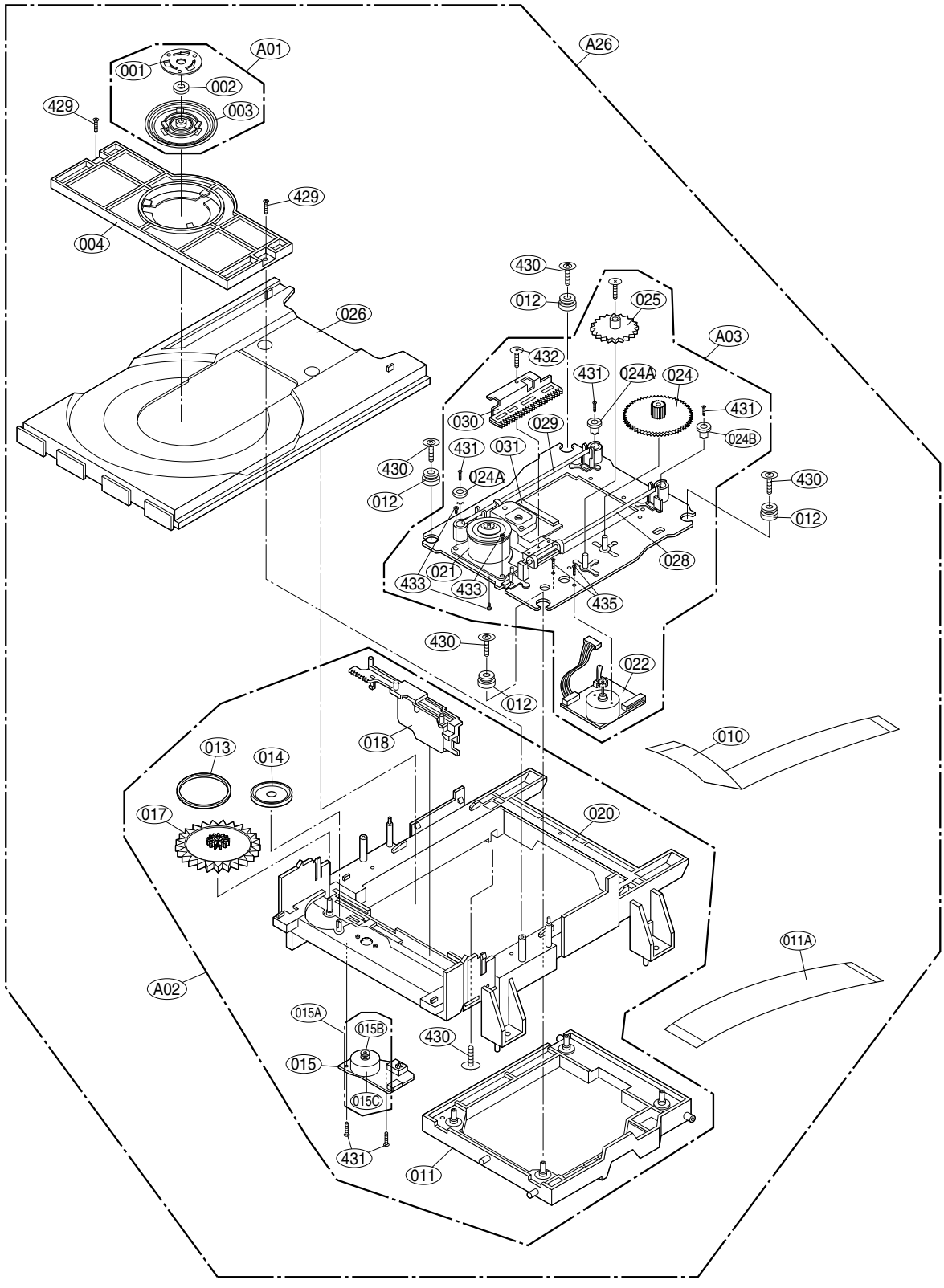
CONTENTS

EXPLODED VIEW

1. Deck Mechanism Exploded View 5-1

EXPLODED VIEWS

1. DECK Mechanism Exploded View



DVD VIDEO PLAYER
SD-33VB

Location No. or Reference No.	TOSHIBA Part Number	Description
002A	5202R00002C	BRUSH,CARBON, ASSY D33 (TIP+2 SPRING)
011A	6850R-JW14E	CABLE,FLAT, P=1.0 FFC UL2896(0.0
015A	4681R-1023E	MOTOR ASSEMBLY, LOADING (DI)
015B	4560R-0008A	PULLEY, MOTOR
015C	4680HP2001A	MOTOR(MECH), RF-300CH-11440(SHAFT
024A	5006R-0044A	CAP, SKEW-T DP7C
024B	5006R-0043A	CAP, SKEW DP7C
052A	4980R-0023A	SUPPORTER, CAPSTAN(D35)
054A	4970R-0124B	SPRING, COIL D35 (RACK F/L)
10	4810R-0125A	BRACKET, CHASSIS
100	3301R-M022A	PLATE ASSEMBLY, TOP
100A	3300R-0184A	PLATE, GND
100B	3300R-M118A	PLATE, TOP(D35)
102	4970R-0130A	SPRING, COIL D35 (STOPPER)
109	5870R-0004A	OPENER, DOOR
11	3210R-M002A	FRAME, UP/DOWN MOLD DP7C
115	4510R-0042A	LEVER, SWITCH
116	4970R-0138A	SPRING, COIL D35 SWITCH
117	3300R-M137A	PLATE, SPRING CST
12	3041R-0037A	BASE ASSY, P2
13	3041R-0038A	BASE ASSY, P3
14	3041R-0039A	BASE ASSY, P4
15	5870R-0005A	OPENER, LID(D35)
16	3041R-0036A	BASE ASSEMBLY, A/C HEAD (ALPS)
17	4408R-0003A	REEL, S
18	4970R-0140A	SPRING, COIL RS D35
19	4421R-0008A	BRAKE ASSEMBLY, RS
2	4680R-B003B	MOTOR(MECH), DRUM VH4301 KUMAGAYA
20	4970R-0128A	SPRING, COIL D35 (TB)
21	4421R-0006A	BRAKE ASSY, T
22	4681R-0034C	MOTOR ASSEMBLY, DECK/MECHA FEED
23	3040R-0057A	BASE, LOADING
24	4261R-0024A	ARM ASSEMBLY, IDLER (H)
25	4470R-0130A	GEAR, MIDDLE DP7C
250	3110R-V004B	CASE, (COMBI-2) PRESS A288
26	3390R-0014A	TRAY, DISK
274	3300R-V032A	PLATE, VB602M PRESS SUS 0.2
276	4930R-0298B	HOLDER,SHELF, TIMER PWB(D+V-RIB CU
28	4370R-0082B	SHAFT, DECK/MECHA PU R DP-7
283	3580R-V054D	DOOR,CASE, VCR VB602CI MOLD CST
284	442-681A	SPRING, DOOR
285	3580R-T084A	DOOR,CASE, TRAY (TOSHIBA COMBI)
29	4261R-0019A	ARM ASSY, PINCH
3	4930R-0284A	HOLDER,SHELF, FPC(6CH)
30	4471R-0013C	GEAR ASSEMBLY, DECK/MECHA RACK DP-7
300	6410RBHV02C	POWER CORD, MP5005SC/HO3VVH2-F V
31	4970R-0123A	SPRING, COIL TENSION(D35)
323	3111R-0089C	CASE ASSEMBLY, PRE-AMP (02-PAL)
330	3140R-V001B	CHASSIS, COMBI-2 PRESS PAL TY
4	4930R-0171A	HOLDER, CLAMP
401	1MEC0261518	SCREW MACHINE,PAN HE, #NAME?
402	1MPC0261418	SCREW MACHINE,PAN HEAD, #NAME?
405	1SZZR-0031B	SCREW,DRAWING, + 1 D2.6 L5.8 SWRCH1
406	1MEC0302018	SCREW MACHINE,PAN HEAD SPR W,
409	1SZZR-0032B	SCREW,DRAWING, + 1 D2.6 L5.0 SWRCH1
410	1APF0262218	SCREW TAP TITE(B),PAN HEAD, #NAME?
429	1SZZR-0012A	SCREW,DRAWING, B-TITE
430	1SZZH-1003A	SCREW,DRAWING, + D2.0 6MM SWRCH16A/NIY 4.5MM 1.5MM MACHINE PAN PL
431	1SZZH-1007B	SCREW,DRAWING, + D2.0 6MM SWRCH16A/ZNBK 4MM 1.2MM TAPPING PAN NO
433	1SZZR-0050A	SCREW,DRAWING, + 1 D2.0 L4.5 SWRCH1
435	1SZZR-0011A	SCREW,DRAWING, MACHINE
452	353-051A	SCREW,DRAWING, SPECIAL
457	353-051E	SCREW,DRAWING, SPECIAL (3X12)
465	353-046K	SCREW,DRAWING, SPECIAL (3X10 B.K)
467	353-051G	SCREW,DRAWING, + 2 D3.0 L8.0 MSWR3/
51	4400R-0005A	BELT, CAPSTAN
517	1WZZR-0004D	WASHER,DRAWING, STOPPER
518	1WZZR-0004A	WASHER,DRAWING, STOPPER
52	4680R-A006A	MOTOR(MECH), CAPSTAN MCVC-035AA L
54	4470R-0100A	GEAR, RACK F/L
55	4470R-0097A	GEAR, DRIVE(D35)
56	4470R-0096A	GEAR, CAM(D35)
58	4421R-0007A	BRAKE ASSY, CAPSTAN
60	4510R-0040A	LEVER, F/R(D35)
61	4265R-0005A	CLUTCH ASSEMBLY, D35 (M)
64	4470R-0098A	GEAR, SECTOR(D35)
76	4510R-0047A	LEVER, SPRING
77	3300R-M116A	PLATE, SLIDER
78	4510R-0041A	LEVER, TENSION
79	3040R-0056A	BASE, TENSION(D35)
8	6850R-HG18Z	CABLE,FLAT, P=1.25 FFC UL2896(0.
801	3835RP0099E	INSTRUCTION ASSEMBLY, VCR VB602CIK.NA4UTT
802	3890R-H787K	BOX, VB602CI NA4UTT SWM3-
803	3920R-E080A	PACKING,CASING, VC6000_S 0.02 150 EP
806	6850R-CAA26	CABLE,COAXIAL, 1200M/M PAL-PAL DOUB

DVD VIDEO PLAYER
SD-33VB

Location No. or Reference No.	TOSHIBA Part Number	Description
808	534-008C	BATTERY,MN, AAAM(R03) 1.5V 1PAIR(LOCAL)
810	6851RP0003F	CABLE ASSY,RF, CABLE ASSY,RF/SCART/
812	6611R2G001A	PLUG ASSY, 2WAY RED/WHITE GLOBA
9	4260R-0038A	ARM, T/UP(D35)
900	6711R2N080B	REMOTE CONTROLLER AS, TOSHIBA VB602CI SE-R
A01	4861R-0016C	CLAMP ASSEMBLY, DECK/MECHA DISC DP-7
A02	3041R-M013C	BASE ASSEMBLY, MAIN DP-7C (DI)
A03	3041R-M016C	BASE ASSEMBLY, SLED DP-7C(7A) DI
A04	4811RF0038A	BRACKET ASSEMBLY, L/D(S)
A11	4471R-0005A	GEAR ASSY, P3
A12	4471R-0004A	GEAR ASSY, P2
A21	4931R-0047A	HOLDER ASSY, CST
A22	4471R-0006A	GEAR ASSY, RACK F/L
A23	4261R-0023A	ARM ASSY, F/L
A24	4510R-0046A	LEVER, ASSY SWITCH
A42	3501R-6412A	BOARD ASSEMBLY, VCR VB602M KEY
A43	3721R-F324F	PANEL ASSEMBLY,FRONT, VB602CI NA4UTT(SD-33
A46	3501R-8119P	BOARD ASSEMBLY, VCR VB602CIK NA4UTT
A46A	6885R-5007A	SUB PWB(PCB) ASSEMBL, 474200D7120560 00000
A48	6871R-7112C	PWB(PCB) ASSEMBLY,TO, 2003 POWER X360,FLD,
A49	3501R-6411A	BOARD ASSEMBLY, VCR VB602M TIMER
BC91	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BC92	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD01	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD101	0DD160000DA	DIODE,RECTIFIERS, S1WBA60 BK SHINDENGEN - 600V - - - -
C105	0CQ1031Y519	CAPACITOR,FIXED FILM, 0.01UF D 630V 10% PE NI TP5
C106	624-087B	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 100P/1KV SMPS SAMHWA
C109	0CE1066K618	CAPACITOR,FIXED ELECTROLYTIC, 10UF SMS,SG 50V 20% FL TP 5
C110	0CG1020U630	CAPACITOR,SEMI CERAM, 1000PF 400V M E(Z5U)
C111	0CG2220U630	CAPACITOR,SEMI CERAMIC, 2200PF D 400V 20% E(Z5U) R
C112	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C117	0CE337EK630	CAPACITOR,AL.ELECTRO, 330UF KMG 50V M FM5
C121	0CE2276F638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 16V 20% FM5 TP 5
C123	0CE477BH630	CAPACITOR,FIXED ELECTROLYTIC, 470UF KME TYPE 25V 20% FM5 BULK
C126	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 25V 20% FM5 TP 5
C127	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC, 1000UF KME TYPE 16V 20% FM5 BULK
C128	0CE3376D638	CAPACITOR,FIXED ELECTROLYTIC, 330UF SMS,SG 10V 20% FM5 TP 5
C129	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC, 2200UF KME TYPE 16V 20% FM5 BULK
C130	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C131	624-082H	CAPACITOR,FIXED ELECTROLYTIC, CE 1000UF/10V SHL(10*12.5)T/P
C132	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C133	0CQ1042K409	CAPACITOR,FIXED FILM, 0.1UF S 50V 5% PE TP5
C135	0CN4710K518	CAPACITOR,FIXED TUBULAR(High dielectric), 470PF D 50V 10% B(Y5P) TA26
C151	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C152	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C153	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C154	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C155	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C156	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C161	0CE4763F638	CAPACITOR,FIXED ELECTROLYTIC, 47000000PF SRE,SE 16V 20% FM5 TP 5
C163	624-087H	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 220PF/1KV CERAMIC
C201	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C202	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C203	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C206	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C207	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C208	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C211	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C212	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C213	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C214	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C216	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C231	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C232	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C233	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C234	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C239	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C240	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C241	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C243	0CH4561K412	CAPACITOR,FIXED CERAMIC(High dielectric), 560PF 50V 5% NP0 1608 R/TP
C244	0CH4561K412	CAPACITOR,FIXED CERAMIC(High dielectric), 560PF 50V 5% NP0 1608 R/TP
C245	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C251	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C252	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C253	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C254	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C255	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C257	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C258	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C259	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C260	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C261	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C262	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C263	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C264	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP

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C265	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C266	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C267	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C268	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C269	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C270	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C271	0CH4391K412	CAPACITOR,FIXED CERAMIC(High dielectric), 390PF 50V 5% NP0 1608 R/TP
C272	0CH4391K412	CAPACITOR,FIXED CERAMIC(High dielectric), 390PF 50V 5% NP0 1608 R/TP
C273	0CH1333K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 1608 R/TP
C274	0CH4471K412	CAPACITOR,FIXED CERAMIC(High dielectric), 470PF 50V 5% NP0 1608 R/TP
C276	0CH4100K112	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 0.5 pF NP0 1608 R/TP
C277	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C278	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C279	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C280	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C281	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C282	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C283	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C291	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C292	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C293	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C295	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C296	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C297	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C298	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C301	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C302	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C303	0CH1122K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1200PF 50V 10% B(5YP) 2012 R/TP
C304	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C305	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C306	0CH1122K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1200PF 50V 10% B(5YP) 2012 R/TP
C307	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C308	0CH1153K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% B(5YP) 2012 R/TP
C309	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C310	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C311	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C312	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C313	0CQ2232L559	CAPACITOR,FIXED FILM, 0.022UF S 63V 10% PP NI TP5
C314	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C315	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C316	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C317	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C318	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C319	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C320	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C321	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C322	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C323	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C324	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C325	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C326	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C327	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C328	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C329	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C330	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C331	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C333	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C334	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C335	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C336	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C337	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C338	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C339	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C340	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C341	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C342	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C343	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C345	0CH1563K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.056UF 50V 10% B(5YP) 2012 R/TP
C346	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C347	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C348	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C349	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C350	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C351	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C353	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C355	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C356	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C357	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C358	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C359	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C361	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C362	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C363	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C366	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C367	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP

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C368	0CH1822K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 8200PF 50V 10% B(5YP) 2012 R/TP
C369	0CH4101K416	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 2012 R/TP
C370	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C371	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C372	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C374	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C375	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C376	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C377	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C401	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C402	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C403	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C404	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C405	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C406	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C407	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C408	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C409	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C410	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C411	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C412	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C413	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C414	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C415	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C416	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C417	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C418	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C419	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C420	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C421	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C422	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C423	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C424	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C425	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C426	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C500	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C501	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C502	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C503	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C504	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C505	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C506	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C507	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% X7R(X) 1608 R/TP
C508	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C509	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C510	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C511	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C512	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C513	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C514	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C515	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C516	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C517	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C518	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C519	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C520	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C521	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C522	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C523	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C524	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C525	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C526	0CE4764J638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 35V 20% FM5 TP 5
C527	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C528	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C530	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C531	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C532	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C533	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C534	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C535	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C536	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C537	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C538	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C539	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C540	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C541	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C542	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C543	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C544	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C545	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C546	0CE4764J638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 35V 20% FM5 TP 5
C547	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C551	0CH1333H516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 25V 10% B(5YP) 2012 R/TP
C552	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C554	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

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C555	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C556	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C557	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C558	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C559	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C560	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C561	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C563	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C564	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C567	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C568	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C569	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C570	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C571	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C575	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C576	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C577	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C578	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C579	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C580	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C581	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C582	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C583	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C584	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C585	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C586	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C587	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C589	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C590	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C591	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C592	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C596	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C597	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C5A1	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C5A2	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5A3	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C5A4	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5A5	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C1	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C5C2	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C4	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C5	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C6	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C7	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C8	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5C9	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C5E0	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5K1	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C5L1	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C5L6	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C5P1	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5P2	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5S1	0CH4430K416	CAPACITOR,FIXED CERAMIC(High dielectric), 43PF 50V 5% NP0 2012 R/TP
C5S3	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C601	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C602	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C603	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C604	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C605	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C606	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C613	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C614	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C706	0CH4330K416	CAPACITOR,FIXED CERAMIC(High dielectric), 33PF 50V 5% NP0 2012 R/TP
C707	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C708	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C709	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C710	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C712	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C713	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C714	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C715	0CH4050K016	CAPACITOR,FIXED CERAMIC(High dielectric), 5PF 50V O.25 pF NP0 2012 R/TP
C716	0CH4100K416	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 5% NP0 2012 R/TP
C717	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C718	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C719	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C720	0CH1152K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% B(5YP) 2012 R/TP
C721	0CH1392K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 2012 R/TP
C722	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C723	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C726	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C727	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C728	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C729	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC, 3.3UF SRA,SS 50V 20% FM5 TP 5
C730	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C731	0CH4090K116	CAPACITOR,FIXED CERA, 9PF 50V 0.5 pF NP0 2

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C732	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C751	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C752	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C755	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C7M1	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C7M2	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C7M3	0CH4270K416	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 2012 R/TP
C7M6	0CH4270K416	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 2012 R/TP
C7V1	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C7V2	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C7V3	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C7V4	0CH1473K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 80%,-20% Y5V(F) 2012 R/TP
C7V5	0CH1473K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 80%,-20% Y5V(F) 2012 R/TP
C802	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C803	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C804	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C805	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C806	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C807	0CE4744K638	CAPACITOR,FIXED ELECTROLYTIC, 0.47UF SRA,SS 50V 20% FM5 TP 5
C808	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C809	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C810	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C811	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C812	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C813	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% B(5YP) 2012 R/TP
C814	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C815	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C816	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C817	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C818	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C819	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% B(5YP) 2012 R/TP
C820	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C821	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C822	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C823	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C824	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C825	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C826	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C828	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C829	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C834	0CE4774F638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 16V 20% FM5 TP 5
C855	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C856	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C857	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C859	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C860	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C861	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C863	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C864	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C869	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C870	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C871	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C884	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C885	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C886	0CE4774F638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 16V 20% FM5 TP 5
C889	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C890	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C891	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C892	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C908	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C910	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C912	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C915	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C916	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C921	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C931	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C932	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C933	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C934	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C935	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C938	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C941	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C942	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
CS501	6600M000002	SWITCH,PUSH, MPU11810MLB0 MIC DC
D101	0DD010009CA	DIODE,RECTIFIERS, EG01C TP SANKEN - - - - - -
D102	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D103	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D106	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D107	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D108	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D110	0DR302000AB	DIODE,RECTIFIERS, HER302 BK RECTRON DO201AD 100V 3A 200A 50SEC -
D111	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
D113	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D114	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D115	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A

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D117	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D118	0DR104510AA	DIODE,RECTIFIERS, B10A45V1 BK KEC TO220 45V 10A - - -
D121	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D301	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D401	0DSRM00118A	DIODE,SWITCHING, DAP202K T146 ROHM R/
D502	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D509	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D601	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D801	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D802	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D901	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D902	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
DG601	6302R-V128A	DIGITRON, 11-MT-139GK FUTABA S
ES501	4931R-0050C	HOLDER ASSEMBLY, END (DI)
ES502	4931R-0050C	HOLDER ASSEMBLY, END (DI)
F101	0FS1601B51D	FUSE,SLOW BLOW, 1600MA 250 V 5.2X20
F102	GIRH200000B	IC,ROHM, ICP-N20 T104 TP IC D
F501	6200JB8010V	FILTER(CIRC),EMC, LFA20-2A1E473MT MITS
F8A1	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
FL301	633-032K	COIL,CAN, BIAC OSC,1CHIP 5V(KS-75M)
IC101	0IPMGSK001A	IC,POWER MANAGEMENT, STR-G6351L SANKEN 5P
IC102	657-063A	SENSOR, LTV-817B,PHOTO COUPLER(LITEON)
IC103	0IKE431000A	IC,KEC, KIA431 - - - -
IC151	0IPMGKE008B	IC,POWER MANAGEMENT, KIA78R08PI CU KEC 4P
IC152	0IPMGFA046A	IC,POWER MANAGEMENT, KA278R33TSTU FAIRCHI
IC201	0ILNRNF006A	IC,LINEAR, MT1336E MEDIATEK INC
IC202	0IPRPSA010A	IC,PERIPHERALS, LA6560-A-TE-L SANYO
IC301	0ILNRSA005B	IC,LINEAR, LA71750EM SANYO 100P
IC3F1A	6957R-609AB	PROGRAM, TOSHIBA (MTK) DVD PR
IC401	0IPRPCI003B	IC,PERIPHERALS, CS4391-KZR CIRRUS LO
IC402	0IJR458000B	IC,JRC, NJM4580M 8,DMP8 TP OP AMP 2K/REEL
IC501	0ILNRNF007A	IC,LINEAR, MT1379DE MEDIATEK IN
IC502	0IMMREB006A	IC,MEMORIES, M12L16161A-7T-TI ELI
IC503	0IAL241600B	IC,ATMEL, AT24C16 - - - -
IC504	0IKE703100A	IC,KEC, KIA7031P 3P 3.1V RESET(TAPING) - - - -
IC505	0IKE704200B	IC,KEC, KIA7042P(AT) TO-92 4.2V RESET - - - -
IC510	0IFA742440F	IC,FAIRCHILD, MM74HCT244SJ 20P SOI
IC5A1	0IMMRBA001A	IC,MEMORIES, A29L800TV-70 AMIC TE
IC5C1	0IPRPMT008A	IC,PERIPHERALS, MM1623XFBE MITSUMI 2
IC601	0IPRPNE001A	IC,PERIPHERALS, UPD16315GB-3BS NEC 4
IC751	0IIT341700B	IC,ITT, MSP3417D-QG QFP44 BK NICAM+A2 -
IC7V1	0ILNRMN001A	IC,LINEAR, SDA5650 MICRONAS 14
IC801	0IPH960500A	IC,PHILIPS, TDA9605H QFP44 BK HIFI AMP+HIFI+S/W
IC802	0IMT144300A	IC,MITSUMI, MM1443XJ SSOP-34 TP CANAL S/W
J803	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
J805	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
JK601	572-034K	JACK,RCA, BJP-303S-04(YL),AU-PLATED
JK602	572-034J	JACK,RCA, BJP-303S-03(WH),AU-PLATED
JK603	572-034H	JACK,RCA, BJP-303S-02(RED),AU-PLATED
JK902	6612J00025G	JACK,RCA, RCA/DIN-38(9PIN)SILV
JK903	6612K00003A	JACK,FIBER OPTIC, PLT131/T5/6 EVERLIGH
L102	616-145P	FILTER(CIRC),DRAWING, LFSQ2215V4-04220B SA
L122	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L123	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L125	633-088D	COIL,CHOKE, CHOCK ,20UH,LEAD CUT
L201	0LR0102J025	INDUCTOR,RADIAL LEAD, 10UH 5% TP 4 X 5 TR5 -
L202	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L203	0LR0102J025	INDUCTOR,RADIAL LEAD, 10UH 5% TP 4 X 5 TR5 -
L204	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L231	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L251	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L261	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L262	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L264	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L265	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L301	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L302	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L303	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L304	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L305	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L307	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L401	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L402	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L403	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L501	0LA0122K018	INDUCTOR,AXIAL LEAD, 12UH 10% TP 2.3 X 3.4 TA26 -
L502	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L503	0LR1000J0N5	INDUCTOR,RADIAL LEAD, 100UH 5% TP 3X5 TR5 -
L504	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L505	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L506	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L507	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L508	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L5C1	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L5S1	0LA0332K018	INDUCTOR,AXIAL LEAD, 33UH 10% TP 2.3 X 3.4 TA26 -
L601	0LR8200J025	INDUCTOR,RADIAL LEAD, 820UH 5% TP 4 X 5 TR5 -

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L602	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L603	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L613	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L701	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L702	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L704	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L705	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L706	0LA0821K018	INDUCTOR,AXIAL LEAD, 8.2UH 10% TP 2.3 X 3.4 TA26 -
L7M1	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L7V1	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L801	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L803	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L901	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L902	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L903	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L904	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L905	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L906	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L907	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L908	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L909	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L910	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
LD501	4931R-0017C	HOLDER ASSY, LED(DI-CKD)LOCAL
LED601	0DL112000AK	LED, DL-11S2GNS(SUPPER,GREEN,03)KOC
LED602	0DL342009DA	LED, SLR-342YY TP ROHM YE
MS501	6600JB8005B	SWITCH,MODE, NON 5V 1MA VERTICAL
Q150	0TR115100AA	TRANSISTOR,BIPOLARS, KSB1151-Y BK SAMSUNG - TO-126
Q153	0TR220309AF	TRANSISTOR,BIPOLARS, SRA2203 TP AUK TO92 22K,22K
Q154	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q155	0TR141409AA	TRANSISTOR,BIPOLARS, KTD1414(TO220IS) CUTING TP KEC - -
Q156	0TR320509AB	TRANSISTOR,BIPOLARS, KTC3205-TP-Y (KTC2236A)KEC
Q161	0TR126809BA	TRANSISTOR,BIPOLARS, KTA1268-BL TP KEC - -
Q162	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q173	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q201	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q202	0TRRH80042A	TRANSISTOR,BIPOLARS, 2SK3018 T106 ROHM KO
Q203	0TRRH80042A	TRANSISTOR,BIPOLARS, 2SK3018 T106 ROHM KO
Q204	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q205	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q301	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q302	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q303	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q304	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q305	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q306	0TR320309AA	TRANSISTOR,BIPOLARS, KTC3203 TP KEC - - -Y (KTC2120)
Q308	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q309	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q401	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q404	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q405	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q501	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q502	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q503	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q504	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q514	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q515	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q5S1	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q705	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q706	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q801	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q802	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q804	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q901	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q902	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q903	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R100	0RD1504H632	RESISTOR,FIXED CARBON FILM, 1.5M OHM 1/2 W 5.00% MF10
R101	614-007A	RESISTOR,FIXED CEMENT, 2.7/2W CEMENT SMPS V
R104	0RS5602K619	RESISTOR,FIXED METAL OXIDE FILM, 56K OHM 2 W 5.00% TR
R105	0RD0472F608	RESISTOR,FIXED CARBON FILM, 47 OHM 1/6 W 5.00% TA26
R106	0RD1803F608	RESISTOR,FIXED CARBON FILM, 180K OHM 1/6 W 5.00% TA26
R107	0RD1803F608	RESISTOR,FIXED CARBON FILM, 180K OHM 1/6 W 5.00% TA26
R110	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R111	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R112	0RD2200F608	RESISTOR,FIXED CARBON FILM, 220 OHM 1/6 W 5.00% TA26
R113	0RD3901F608	RESISTOR,FIXED CARBON FILM, 3.9K OHM 1/6 W 5.00% TA26
R114	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R115	0RN3301F408	RESISTOR,FIXED METAL FILM, 3.3K OHM 1/6 W 1.00% TA26
R116	0RN2701F408	RESISTOR,FIXED METAL FILM, 2.7K OHM 1/6 W 1.00% TA26
R117	0RD2700F608	RESISTOR,FIXED CARBON FILM, 270 OHM 1/6 W 5.00% TA26
R118	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R119	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R124	0RS0350K619	RESISTOR,FIXED METAL OXIDE FILM, 0.35 OHM 2 W 5.00% TR
R125	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R126	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R130	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26

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R131	0RD2202F608	RESISTOR,FIXED CARBON FILM, 22K OHM 1/6 W 5.00% TA26
R151	0RD5601F608	RESISTOR,FIXED CARBON FILM, 5.6K OHM 1/6 W 5.00% TA26
R152	0RD5601F608	RESISTOR,FIXED CARBON FILM, 5.6K OHM 1/6 W 5.00% TA26
R153	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R154	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R155	0RD1802F608	RESISTOR,FIXED CARBON FILM, 18K OHM 1/6 W 5.00% TA26
R156	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R157	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R158	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R159	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R164	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R167	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R168	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R170	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R171	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R172	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R173	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R201	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R202	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R203	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R204	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R205	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R206	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R207	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R208	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R209	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R210	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R211	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R212	0RJ7503C677	RESISTOR,METAL GLAZE, 750K OHM 1/16 W 5% 1
R213	0RH3903C622	RESISTOR,METAL GLAZED(CHIP), 390K OHM 1 / 16 W 1608 5.00% D
R214	0RJ7503C677	RESISTOR,METAL GLAZE, 750K OHM 1/16 W 5% 1
R215	0RH3903C622	RESISTOR,METAL GLAZED(CHIP), 390K OHM 1 / 16 W 1608 5.00% D
R216	0RH0101C622	RESISTOR,METAL GLAZE, 1 OHM 1 / 16 W 1608
R217	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R218	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R220	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R221	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R231	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R232	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R233	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R234	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R235	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R236	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R237	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R238	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R239	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R240	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R241	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R242	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R243	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R244	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R245	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R246	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R251	0RH3302C622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 16 W 1608 5.00% D
R252	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R253	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R254	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R255	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R256	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R257	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R258	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R259	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R301	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R302	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R303	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R304	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R305	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R306	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R307	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R308	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R309	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R310	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R311	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R312	0RH6802D622	RESISTOR,METAL GLAZED(CHIP), 68K OHM 1 / 10 W 2012 5.00% D
R313	0RH0221D622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 10 W 2012 5.00% D
R314	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R315	0RH0472D622	RESISTOR,METAL GLAZED(CHIP), 47 OHM 1 / 10 W 2012 5.00% D
R316	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R317	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R318	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R319	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R320	0RH1500D622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 10 W 2012 5.00% D
R321	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R322	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R324	0RH3303D622	RESISTOR,METAL GLAZED(CHIP), 330K OHM 1 / 10 W 2012 5.00% D

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R325	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R326	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R327	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R328	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R329	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R330	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R331	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R332	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R333	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R334	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R335	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R336	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R337	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R338	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R339	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R340	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R342	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R343	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R344	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R345	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R346	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R347	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R348	0RH1504D622	RESISTOR,METAL GLAZED(CHIP), 1.5M OHM 1 / 10 W 2012 5.00% D
R349	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R350	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R351	0RH8203D622	RESISTOR,METAL GLAZED(CHIP), 820K OHM 1 / 10 W 2012 5.00% D
R352	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R353	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R3A2	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R401	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R402	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R403	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R404	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R405	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R407	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R408	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R409	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R410	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R411	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R412	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R413	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R414	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R415	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R416	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R417	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R418	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R419	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R420	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R421	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R422	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R423	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R424	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R425	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R426	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R427	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R501	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R502	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R503	0RH0471C622	RESISTOR,METAL GLAZED(CHIP), 4.7 OHM 1 / 16 W 1608 5.00% D
R504	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R505	0RH0471C622	RESISTOR,METAL GLAZED(CHIP), 4.7 OHM 1 / 16 W 1608 5.00% D
R506	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R507	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R508	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R509	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R510	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R511	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R512	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R513	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R514	0RH1203D622	RESISTOR,METAL GLAZED(CHIP), 120K OHM 1 / 10 W 2012 5.00% D
R515	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R516	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R517	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R518	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R519	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R520	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R521	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R522	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R523	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R524	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R525	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R526	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R527	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R528	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R529	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R530	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D

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R531	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R534	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R535	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R542	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R543	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R544	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R545	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R546	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R547	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R548	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R550	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R553	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R554	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R555	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R556	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R557	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R558	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R559	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R560	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R561	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R562	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R563	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R564	0RH1802C622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 16 W 1608 5.00% D
R565	0RH1802C622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 16 W 1608 5.00% D
R566	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R567	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R568	0RH6802D622	RESISTOR,METAL GLAZED(CHIP), 68K OHM 1 / 10 W 2012 5.00% D
R569	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R570	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R573	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R574	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R575	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R576	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R577	0RH4700C622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 16 W 1608 5.00% D
R578	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R579	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R580	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R581	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R582	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R583	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R584	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R585	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R586	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R587	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R589	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R591	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R5A2	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5A3	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5A5	0RH4703D622	RESISTOR,METAL GLAZED(CHIP), 470K OHM 1 / 10 W 2012 5.00% D
R5A7	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R5A9	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R5B3	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5B4	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5B5	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5C1	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C3	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R5C4	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R5C5	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C6	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C7	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C9	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R5E1	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R5K6	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5K7	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5K8	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5L1	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R5P2	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5P3	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5R8	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5S1	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R5S2	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R601	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R602	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R603	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R604	0RD5602F608	RESISTOR,FIXED CARBON FILM, 56K OHM 1/6 W 5.00% TA26
R605	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R606	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R607	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R608	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R609	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R610	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R611	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R612	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R613	0RD1201F608	RESISTOR,FIXED CARBON FILM, 1.2K OHM 1/6 W 5.00% TA26
R614	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26

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Location No. or Reference No.	TOSHIBA Part Number	Description
R615	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R616	0RD3301F608	RESISTOR,FIXED CARBON FILM, 3.3K OHM 1/6 W 5.00% TA26
R617	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R618	0RD2701F608	RESISTOR,FIXED CARBON FILM, 2.7K OHM 1/6 W 5.00% TA26
R619	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R630	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R631	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R633	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R641	0RD0752F608	RESISTOR,FIXED CARBON FILM, 75 OHM 1/6 W 5.00% TA26
R705	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R706	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R707	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R710	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R711	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R712	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R713	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R714	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R715	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R716	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R717	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R718	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R719	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R7M1	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R7M2	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R7M4	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R7M5	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R7V1	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R7V2	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R7V3	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R7V4	0RH5603D622	RESISTOR,METAL GLAZED(CHIP), 560K OHM 1 / 10 W 2012 5.00% D
R7V5	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R7V6	0RH5603D622	RESISTOR,METAL GLAZED(CHIP), 560K OHM 1 / 10 W 2012 5.00% D
R7V7	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R7V8	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R7V9	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R801	0RH3304D622	RESISTOR,METAL GLAZED(CHIP), 3.3M OHM 1 / 10 W 2012 5.00% D
R802	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R803	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R804	0RH3902D622	RESISTOR,METAL GLAZED(CHIP), 39K OHM 1 / 10 W 2012 5.00% D
R805	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R806	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R807	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R808	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R809	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R810	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R811	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R812	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R821	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R822	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R823	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R824	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R825	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R826	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R835	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R841	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R842	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R850	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R851	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R861	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R862	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R863	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R864	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R874	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R875	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R876	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R890	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R902	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R903	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R904	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R905	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R906	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R907	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R908	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R909	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R910	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R911	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R913	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R914	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R919	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R920	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R921	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R922	0LCCE00004L	INDUCTOR,CHIP, 1UH , CHIP2012 CERAT
R923	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R924	0LCCE00004L	INDUCTOR,CHIP, 1UH , CHIP2012 CERAT
R925	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D

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Location No. or Reference No.	TOSHIBA Part Number	Description
R926	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R927	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R928	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R929	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R930	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R931	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R932	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R933	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R934	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R935	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R937	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R938	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
RC601	6712R0838GA	REMOTE CONTROLLER RECEIVER, TSOP1238UQ1 TEMIC 8MM 37.9KHZ
RS501	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
RS502	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
SC901	6620RM0002L	JACK,SCART, DSAM-0139 DOOWON 2F-
SW601	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW602	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW603	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW604	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW605	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW606	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW607	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW608	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW609	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW610	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW611	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW901	6600R-SH18A	SWITCH,TACT, CSS-4206 CHANG SHIN
T101	6170RNGW12F	TRANSFORMER,SMPS[COI, EER3534, 580UH SAMWH
TU701	6700PFPL06F	TUNER, TADC-M401D(GKI,LGIT)
V101	656-004C	VARISTOR, SVC681D-10A SAMHWA 4.O CUT
W714	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W901	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W902	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W903	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
X301	6202R2443AC	CRYSTAL,STANDARD, H49U KJE RADIAL 4.433709MHZ 15PPM SERPF TP
X501	6202R-BL06C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X502	6202R-DA01B	RESONATOR,CRYSTAL, CFS-308 CITIZEN 32.7
X751	529-021Q	CRYSTAL,STANDARD, 49U KJE RADIAL 18432000HZ 30PPM 16PF BK
ZD101	0DZ330009BF	DIODE,ZENER, GDZJ3.3B TP GRANDE D
ZD103	0DZ130009AA	DIODE,ZENERS, MTZ13A TP ROHM - - - - -
ZD104	0DZ300000MB	DIODE,ZENERS, UZ-30BSC 26MM PYUNG
ZD501	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -

MEMO

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Location No. or Reference No.	TOSHIBA Part Number	Description
002A	5202R00002C	BRUSH,CARBON, ASSY D33 (TIP+2 SPRING) 1.4,
011A	6850R-JW14E	CABLE,FLAT, P=1.0 FFC UL2896(0.0
015A	4681R-1023E	MOTOR ASSEMBLY, LOADING (DI)
015B	4560R-0008A	PULLEY, MOTOR
015C	4680HP2001A	MOTOR(MECH), RF-300CH-11440(SHAFT 6.05L)M/C
024A	5006R-0044A	CAP, SKEW-T DP7C
024B	5006R-0043A	CAP, SKEW DP7C
052A	4980R-0023A	SUPPORTER, CAPSTAN(D35)
054A	4970R-0124B	SPRING, COIL D35 (RACK F/L)
10	4810R-0125A	BRACKET, CHASSIS
100	3301R-M022A	PLATE ASSEMBLY, TOP
100A	3300R-0184A	PLATE, GND
100B	3300R-M118A	PLATE, TOP(D35)
102	4970R-0130A	SPRING, COIL D35 (STOPPER)
109	5870R-0004A	OPENER, DOOR
11	3210R-M002A	FRAME, UP/DOWN MOLD DP7C
115	4510R-0042A	LEVER, SWITCH
116	4970R-0138A	SPRING, COIL D35 SWITCH
117	3300R-M137A	PLATE, SPRING CST
12	3041R-0037A	BASE ASSY, P2
13	3041R-0038A	BASE ASSY, P3
14	3041R-0039A	BASE ASSY, P4
15	5870R-0005A	OPENER, LID(D35)
16	3041R-0036A	BASE ASSEMBLY, A/C HEAD (ALPS)
17	4408R-0003A	REEL, S
18	4970R-0140A	SPRING, COIL RS D35
19	4421R-0008A	BRAKE ASSEMBLY, RS
2	4680R-B003B	MOTOR(MECH), DRUM VH4301 KUMAGAYA
20	4970R-0128A	SPRING, COIL D35 (TB)
21	4421R-0006A	BRAKE ASSY, T
22	4681R-0034C	MOTOR ASSEMBLY, DECK/MECHA FEED DP-7
23	3040R-0057A	BASE, LOADING
24	4261R-0024A	ARM ASSEMBLY, IDLER (H)
25	4470R-0130A	GEAR, MIDDLE DP7C
250	3110R-V004B	CASE, (COMBI-2) PRESS A288
26	3390R-0014A	TRAY, DISK
274	3300R-V032A	PLATE, VB602M PRESS SUS 0.2
276	4930R-0298B	HOLDER,SHELF, TIMER PWB(D+V-RIB CU
28	4370R-0082B	SHAFT, DECK/MECHA PU R DP-7
283	3580R-V054C	DOOR,CASE, VCR VB602CS MOLD CST
284	442-681A	SPRING, DOOR
285	3580R-T084A	DOOR,CASE, TRAY (TOSHIBA COMBI)
29	4261R-0019A	ARM ASSY, PINCH
3	4930R-0284A	HOLDER,SHELF, FPC(6CH)
30	4471R-0013C	GEAR ASSEMBLY, DECK/MECHA RACK DP-7
300	6410RCHP02B	POWER CORD, HIT-102/H0VHH2-F(WIT
31	4970R-0123A	SPRING, COIL TENSION(D35)
323	3111R-0089C	CASE ASSEMBLY, PRE-AMP (02-PAL)
330	3140R-V001B	CHASSIS, COMBI-2 PRESS PAL TY
4	4930R-0171A	HOLDER, CLAMP
401	1MEC0261518	SCREW MACHINE,PAN HE, #NAME?
402	1MPC0261418	SCREW MACHINE,PAN HEAD, #NAME?
405	1SZZR-0031B	SCREW,DRAWING, + 1 D2.6 L5.8 SWRCH1
406	1MEC0302018	SCREW MACHINE,PAN HEAD SPR W, #NAME?
409	1SZZR-0032B	SCREW,DRAWING, + 1 D2.6 L5.0 SWRCH1
410	1APF0262218	SCREW TAP TITE(B),PAN HEAD, #NAME?
429	1SZZR-0012A	SCREW,DRAWING, B-TITE
430	1SZZH-1003A	SCREW,DRAWING, + D2.0 6MM SWRCH16A/NIY 4.5MM 1.5MM MACHINE PAN PL
431	1SZZH-1007B	SCREW,DRAWING, + D2.0 6MM SWRCH16A/ZNBK 4MM 1.2MM TAPPING PAN NO
433	1SZZR-0050A	SCREW,DRAWING, + 1 D2.0 L4.5 SWRCH1
435	1SZZR-0011A	SCREW,DRAWING, MACHINE
452	353-051A	SCREW,DRAWING, SPECIAL
457	353-051E	SCREW,DRAWING, SPECIAL (3X12)
465	353-046K	SCREW,DRAWING, SPECIAL (3X10 B.K)
467	353-051G	SCREW,DRAWING, + 2 D3.0 L8.0 MSWR3/
51	4400R-0005A	BELT, CAPSTAN
517	1WZZR-0004D	WASHER,DRAWING, STOPPER
518	1WZZR-0004A	WASHER,DRAWING, STOPPER
52	4680R-A006A	MOTOR(MECH), CAPSTAN MCVC-035AA L
54	4470R-0100A	GEAR, RACK F/L
55	4470R-0097A	GEAR, DRIVE(D35)
56	4470R-0096A	GEAR, CAM(D35)
58	4421R-0007A	BRAKE ASSY, CAPSTAN
60	4510R-0040A	LEVER, F/R(D35)
61	4265R-0005A	CLUTCH ASSEMBLY, D35 (M)
64	4470R-0098A	GEAR, SECTOR(D35)
76	4510R-0047A	LEVER, SPRING
77	3300R-M116A	PLATE, SLIDER
78	4510R-0041A	LEVER, TENSION
79	3040R-0056A	BASE, TENSION(D35)
8	6850R-HG18Z	CABLE,FLAT, P=1.25 FFC UL2896(0.
801	3835RP0099G	INSTRUCTION ASSEMBLY, VCR VB602CSK.NA3FTT
802	3890R-H787M	BOX, VB602CS NA3FTT SWM3-
803	3920R-E080A	PACKING,CASING, VC6000_S 0.02 150 EP
806	6850R-CAA26	CABLE,COAXIAL, 1200M/M PAL-PAL DOUB

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Location No. or Reference No.	TOSHIBA Part Number	Description
808	534-008C	BATTERY,MN, AAAM(R03) 1.5V 1PAIR(LOCAL)
810	6851R-0009B	CABLE ASSEMBLY, COMBI ACC WITH BOX (
812	6611R2G001A	PLUG ASSY, 2WAY RED/WHITE GLOBA
821	6850R-SUA2A	CABLE,COAXIAL, 1200M/M SCART-SCART
9	4260R-0038A	ARM, T/UP(D35)
900	6711R2N080C	REMOTE CONTROLLER AS, TOSHIBA VB602CP SE-R
A01	4861R-0016C	CLAMP ASSEMBLY, DECK/MECHA DISC DP-7
A02	3041R-M013C	BASE ASSEMBLY, MAIN DP-7C (DI)
A03	3041R-M016C	BASE ASSEMBLY, SLED DP-7C(7A) DI
A04	4811RF0038A	BRACKET ASSEMBLY, L/D(S)
A11	4471R-0005A	GEAR ASSY, P3
A12	4471R-0004A	GEAR ASSY, P2
A21	4931R-0047A	HOLDER ASSY, CST
A22	4471R-0006A	GEAR ASSY, RACK F/L
A23	4261R-0023A	ARM ASSY, F/L
A24	4510R-0046A	LEVER, ASSY SWITCH
A42	3501R-6412A	BOARD ASSEMBLY, VCR VB602M KEY
A43	3721R-F324E	PANEL ASSEMBLY,FRONT, VB602CS NA3FTT(SD-33
A46	3501R-8119Q	BOARD ASSEMBLY, VCR VB602SK NA3FTT
A46A	6885R-5008A	SUB PWB(PCB) ASSEMBL, 465202D7120560 00000
A48	6871R-7112C	PWB(PCB) ASSEMBLY,TO, 2003 POWER X360,FLD,
A49	3501R-6411A	BOARD ASSEMBLY, VCR VB602M TIMER
BC91	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BC92	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD01	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD101	0DD160000DA	DIODE,RECTIFIERS, S1WBA60 BK SHINDENGEN - 600V - - - -
C101	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C102	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C103	624-082C	CAPACITOR,FIXED ELECTROLYTIC, 100MF/400V SHL SMPS S/Y
C104	0CQ2232K409	CAPACITOR,FIXED FILM, 0.022UF S 50V 5% PE TP5
C105	0CQ1031Y519	CAPACITOR,FIXED FILM, 0.01UF D 630V 10% PE NI TP5
C106	624-087B	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 100P/1KV SMPS SAMHWA
C109	0CE1066K618	CAPACITOR,FIXED ELECTROLYTIC, 10UF SMS,SG 50V 20% FL TP 5
C110	0CG1020U630	CAPACITOR,SEMI CERAM, 1000PF 400V M E(Z5U)
C111	0CG2220U630	CAPACITOR,SEMI CERAMIC, 2200PF D 400V 20% E(Z5U) R
C112	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C117	0CE337EK630	CAPACITOR,AL.ELECTRO, 330UF KMG 50V M FM5
C121	0CE2276F638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 16V 20% FM5 TP 5
C123	0CE477BH630	CAPACITOR,FIXED ELECTROLYTIC, 470UF KME TYPE 25V 20% FM5 BULK
C126	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 25V 20% FM5 TP 5
C127	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC, 1000UF KME TYPE 16V 20% FM5 BULK
C128	0CE3376D638	CAPACITOR,FIXED ELECTROLYTIC, 330UF SMS,SG 10V 20% FM5 TP 5
C129	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC, 2200UF KME TYPE 16V 20% FM5 BULK
C130	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C131	624-082H	CAPACITOR,FIXED ELECTROLYTIC, CE 1000UF/10V SHL(10*12.5)T/P
C132	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C133	0CQ1042K409	CAPACITOR,FIXED FILM, 0.1UF S 50V 5% PE TP5
C135	0CN4710K518	CAPACITOR,FIXED TUBULAR(High dielectric), 470PF D 50V 10% B(Y5P) TA26
C151	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C152	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C153	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C154	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C155	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C156	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C161	0CE4763F638	CAPACITOR,FIXED ELECTROLYTIC, 47000000PF SRE,SE 16V 20% FM5 TP 5
C163	624-087H	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 220PF/1KV CERAMIC
C201	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C202	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C203	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C204	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C205	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C206	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C207	0CE4744K638	CAPACITOR,FIXED ELECTROLYTIC, 0.47UF SRA,SS 50V 20% FM5 TP 5
C208	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C209	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C210	0CE4744K638	CAPACITOR,FIXED ELECTROLYTIC, 0.47UF SRA,SS 50V 20% FM5 TP 5
C211	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C212	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C213	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C214	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C215	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C216	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C231	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C232	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C233	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C234	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C239	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C240	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C241	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C243	0CH4561K412	CAPACITOR,FIXED CERAMIC(High dielectric), 560PF 50V 5% NP0 1608 R/TP
C244	0CH4561K412	CAPACITOR,FIXED CERAMIC(High dielectric), 560PF 50V 5% NP0 1608 R/TP
C245	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C251	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C252	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C253	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

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Location No. or Reference No.	TOSHIBA Part Number	Description
C254	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C255	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C257	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C258	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C259	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C260	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C261	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C262	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C263	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C264	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C265	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C266	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C267	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C268	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C269	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C270	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C271	0CH4391K412	CAPACITOR,FIXED CERAMIC(High dielectric), 390PF 50V 5% NP0 1608 R/TP
C272	0CH4391K412	CAPACITOR,FIXED CERAMIC(High dielectric), 390PF 50V 5% NP0 1608 R/TP
C273	0CH1333K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 1608 R/TP
C274	0CH4471K412	CAPACITOR,FIXED CERAMIC(High dielectric), 470PF 50V 5% NP0 1608 R/TP
C276	0CH4100K112	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 0.5 pF NP0 1608 R/TP
C277	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C278	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C279	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C280	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C281	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C282	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C283	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C291	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C292	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C293	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C295	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C296	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C297	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C298	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C301	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C302	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C303	0CH1122K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1200PF 50V 10% B(5YP) 2012 R/TP
C304	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C305	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C306	0CH1122K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1200PF 50V 10% B(5YP) 2012 R/TP
C307	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C308	0CH1153K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% B(5YP) 2012 R/TP
C309	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C310	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C311	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C312	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C313	0CQ2232L559	CAPACITOR,FIXED FILM, 0.022UF S 63V 10% PP NI TP5
C314	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C315	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C316	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C317	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C318	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C319	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C320	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C321	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C322	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C323	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C324	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C325	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C326	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C327	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C328	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C329	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C330	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C331	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C333	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C334	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C335	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C336	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C337	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C338	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C339	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C340	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C341	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C342	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C343	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C345	0CH1563K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.056UF 50V 10% B(5YP) 2012 R/TP
C346	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C347	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C348	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C349	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C350	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C351	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C353	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5

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C355	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C356	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C357	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C358	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C359	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C361	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C362	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C363	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C366	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C367	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C368	0CH1822K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 8200PF 50V 10% B(5YP) 2012 R/TP
C369	0CH4101K416	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 2012 R/TP
C370	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C371	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C372	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C374	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C375	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C376	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C377	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C401	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C402	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C403	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C404	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C405	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C406	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C407	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C408	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C409	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C410	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C411	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C412	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C413	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C414	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C415	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C416	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C417	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C418	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C419	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C420	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C421	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C422	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C423	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C424	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C425	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C426	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C500	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C501	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C502	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C503	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C504	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C505	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C506	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C507	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% X7R(X) 1608 R/TP
C508	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C509	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C510	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C511	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C512	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C513	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C514	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C515	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C516	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C517	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C518	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C519	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C520	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C521	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C522	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C523	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C524	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C525	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C526	0CE4764J638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 35V 20% FM5 TP 5
C527	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C528	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C530	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C531	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C532	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C533	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C534	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C535	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C536	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C537	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C538	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C539	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C540	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

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C541	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C542	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C543	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C544	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C545	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C546	0CE4764J638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 35V 20% FM5 TP 5
C547	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C551	0CH1333H516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 25V 10% B(5YP) 2012 R/TP
C552	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C554	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C555	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C556	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C557	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C558	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C559	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C560	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C561	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C563	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C564	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C567	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C568	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C569	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C570	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C571	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C575	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C576	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C577	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C578	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C579	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C580	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C581	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C582	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C583	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C584	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C585	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C586	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C587	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C589	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C590	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C591	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C592	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C596	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C597	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C5A1	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C5A2	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5A3	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C5A4	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5A5	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C1	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C5C2	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C4	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C5	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C6	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C7	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C8	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5C9	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C5E0	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5K1	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C5L1	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C5L6	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C5P1	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5P2	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5S1	0CH4430K416	CAPACITOR,FIXED CERAMIC(High dielectric), 43PF 50V 5% NP0 2012 R/TP
C5S3	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C601	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C602	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C603	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C604	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C605	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C606	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C613	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C614	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C706	0CH4330K416	CAPACITOR,FIXED CERAMIC(High dielectric), 33PF 50V 5% NP0 2012 R/TP
C707	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C708	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C709	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C710	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C712	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C713	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C714	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C715	0CH4050K016	CAPACITOR,FIXED CERAMIC(High dielectric), 5PF 50V O.25 pF NP0 2012 R/TP
C716	0CH4100K416	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 5% NP0 2012 R/TP
C717	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C718	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C719	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5

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Location No. or Reference No.	TOSHIBA Part Number	Description
C720	0CH1152K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% B(5YP) 2012 R/TP
C721	0CH1392K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 2012 R/TP
C722	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C723	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C726	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C727	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C728	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C729	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC, 3.3UF SRA,SS 50V 20% FM5 TP 5
C730	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C731	0CH4090K116	CAPACITOR,FIXED CERA, 9PF 50V 0.5 pF NP0 2
C732	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C751	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C752	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C755	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C7S1	0CE3364F638	CAPACITOR,FIXED ELECTROLYTIC, 33UF SRA,SS 16V 20% FM5 TP 5
C7S2	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C7V1	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C7V2	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C7V3	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C7V4	0CH1473K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 80%,-20% Y5V(F) 2012 R/TP
C7V5	0CH1473K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 80%,-20% Y5V(F) 2012 R/TP
C802	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C803	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C804	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C805	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C806	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C807	0CE4744K638	CAPACITOR,FIXED ELECTROLYTIC, 0.47UF SRA,SS 50V 20% FM5 TP 5
C808	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C809	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C810	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C811	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C812	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C813	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% B(5YP) 2012 R/TP
C814	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C815	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C816	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C817	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C818	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C819	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% B(5YP) 2012 R/TP
C820	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C821	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C822	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C823	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C824	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C825	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C826	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C828	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C829	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C834	0CE4774F638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 16V 20% FM5 TP 5
C855	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C856	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C857	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C859	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C860	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C861	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C863	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C864	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C869	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C870	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C871	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C884	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C885	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C886	0CE4774F638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 16V 20% FM5 TP 5
C887	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C888	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C889	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C890	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C891	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C892	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C908	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C910	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C912	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C915	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C916	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C921	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C931	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C932	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C933	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C934	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C935	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C938	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C941	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C942	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
CS501	6600M000002	SWITCH,PUSH, MPU11810MLB0 MIC DC
D101	0DD010009CA	DIODE,RECTIFIERS, EG01C TP SANKEN - - - - - -

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Location No. or Reference No.	TOSHIBA Part Number	Description
D102	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D103	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D106	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D107	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D108	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D110	0DR302000AB	DIODE,RECTIFIERS, HER302 BK RECTRON DO201AD 100V 3A 200A 50SEC -
D111	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
D113	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D114	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D115	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D117	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D118	0DR104510AA	DIODE,RECTIFIERS, B10A45V1 BK KEC TO220 45V 10A - - -
D121	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D301	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D401	0DSRM00118A	DIODE,SWITCHING, DAP202K T146 ROHM R/
D502	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D509	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D601	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D801	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D802	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D902	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
DG601	6302R-V128A	DIGITRON, 11-MT-139GK FUTABA S
ES501	4931R-0050C	HOLDER ASSEMBLY, END (DI)
ES502	4931R-0050C	HOLDER ASSEMBLY, END (DI)
F101	0FS1601B51D	FUSE,SLOW BLOW, 1600MA 250 V 5.2X20
F102	GIRH200000B	IC,ROHM, ICP-N20 T104 TP IC D
F501	6200JB8010V	FILTER(CIRC),EMC, LFA20-2A1E473MT MITS
F8A1	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
FL301	633-032K	COIL,CAN, BIAC OSC,1CHIP 5V(KS-75M)
IC101	0IPMGSK001A	IC,POWER MANAGEMENT, STR-G6351L SANKEN 5P
IC102	657-063A	SENSOR, LTV-817B,PHOTO COUPLER(LITEON)
IC103	0IKE431000A	IC,KEC, KIA431 - - - -
IC151	0IPMGKE008B	IC,POWER MANAGEMENT, KIA78R08PI CU KEC 4P
IC152	0IPMGFA046A	IC,POWER MANAGEMENT, KA278R33TSTU FAIRCHI
IC201	0ILNRNF006A	IC,LINEAR, MT1336E MEDIATEK INC
IC202	0IPRPSA010A	IC,PERIPHERALS, LA6560-A-TE-L SANYO
IC301	0ILNRSA005B	IC,LINEAR, LA71750EM SANYO 100P
IC3F1A	6957R-609AB	PROGRAM, TOSHIBA (MTK) DVD PR
IC401	0IPRPCI003B	IC,PERIPHERALS, CS4391-KZR CIRRUS LO
IC402	0IJR458000B	IC,JRC, NJM4580M 8,DMP8 TP OP AMP 2K/REEL
IC501	0ILNRNF007A	IC,LINEAR, MT1379DE MEDIATEK IN
IC502	0IMMREB006A	IC,MEMORIES, M12L16161A-7T-TI ELI
IC503	0IAL241600B	IC,ATMEL, AT24C16 - - - -
IC504	0IKE703100A	IC,KEC, KIA7031P 3P 3.1V RESET(TAPING) - - - -
IC505	0IKE704200B	IC,KEC, KIA7042P(AT) TO-92 4.2V RESET - - - -
IC510	0IFA742440F	IC,FAIRCHILD, MM74HCT244SJ 20P SOI
IC5A1	0IMMRBA001A	IC,MEMORIES, A29L800TV-70 AMIC TE
IC5C1	0IPRPMT008A	IC,PERIPHERALS, MM1623XFBE MITSUMI 2
IC601	0IPRPNE001A	IC,PERIPHERALS, UPD16315GB-3BS NEC 4
IC751	0IIT341700B	IC,ITT, MSP3417D-QG QFP44 BK NICAM+A2 -
IC7V1	0ILNRMN001A	IC,LINEAR, SDA5650 MICRONAS 14
IC801	0IPH960500A	IC,PHILIPS, TDA9605H QFP44 BK HIFI AMP+HIFI+S/W
IC802	0IMT144300A	IC,MITSUMI, MM1443XJ SSOP-34 TP CANAL S/W
J806	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
JK601	572-034K	JACK,RCA, BJP-303S-04(YL),AU-PLATED
JK602	572-034J	JACK,RCA, BJP-303S-03(WH),AU-PLATED
JK603	572-034H	JACK,RCA, BJP-303S-02(RED),AU-PLATED
JK902	6612J00025G	JACK,RCA, RCA/DIN-38(9PIN)SILV
JK903	6612K00003A	JACK,FIBER OPTIC, PLT131/T5/6 EVERLIGH
L102	616-145P	FILTER(CIRC),DRAWING, LFSQ2215V4-04220B SA
L122	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L123	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L125	633-088D	COIL,CHOKE, CHOCK ,20UH,LEAD CUT
L201	0LR0102J025	INDUCTOR,RADIAL LEAD, 10UH 5% TP 4 X 5 TR5 -
L202	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L203	0LR0102J025	INDUCTOR,RADIAL LEAD, 10UH 5% TP 4 X 5 TR5 -
L204	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L231	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L251	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L261	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L262	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L264	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L265	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L301	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L302	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L303	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L304	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L305	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L307	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L401	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L402	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L403	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L501	0LA0122K018	INDUCTOR,AXIAL LEAD, 12UH 10% TP 2.3 X 3.4 TA26 -
L502	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L503	0LR1000J0N5	INDUCTOR,RADIAL LEAD, 100UH 5% TP 3X5 TR5 -

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Location No. or Reference No.	TOSHIBA Part Number	Description
L504	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L505	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L506	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L507	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L508	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L5C1	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L5S1	0LA0332K018	INDUCTOR,AXIAL LEAD, 33UH 10% TP 2.3 X 3.4 TA26 -
L601	0LR8200J025	INDUCTOR,RADIAL LEAD, 820UH 5% TP 4 X 5 TR5 -
L602	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L603	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L613	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L701	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L702	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L704	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L705	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L706	0LA0821K018	INDUCTOR,AXIAL LEAD, 8.2UH 10% TP 2.3 X 3.4 TA26 -
L7V1	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L801	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L803	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L901	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L902	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L903	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L904	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L905	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L906	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L907	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L908	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L909	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L910	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
LD501	4931R-0017C	HOLDER ASSY, LED(DI-CKD)LOCAL
LED601	0DL112000AK	LED, DL-11S2GNS(SUPPER,GREEN,03)KOC
LED602	0DL342009DA	LED, SLR-342YY TP ROHM YE
MS501	6600JB8005B	SWITCH,MODE, NON 5V 1MA VERTICAL
Q150	0TR115100AA	TRANSISTOR,BIPOLARS, KSB1151-Y BK SAMSUNG - TO-126
Q153	0TR220309AF	TRANSISTOR,BIPOLARS, SRA2203 TP AUK TO92 22K,22K
Q154	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q155	0TR141409AA	TRANSISTOR,BIPOLARS, KTD1414(TO220IS) CUTING TP KEC - -
Q156	0TR320509AB	TRANSISTOR,BIPOLARS, KTC3205-TP-Y (KTC2236A)KEC
Q161	0TR126809BA	TRANSISTOR,BIPOLARS, KTA1268-BL TP KEC - -
Q162	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q173	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q201	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q202	0TRRH80042A	TRANSISTOR,BIPOLARS, 2SK3018 T106 ROHM KO
Q203	0TRRH80042A	TRANSISTOR,BIPOLARS, 2SK3018 T106 ROHM KO
Q204	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q205	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q301	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q302	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q303	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q304	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q305	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q306	0TR320309AA	TRANSISTOR,BIPOLARS, KTC3203 TP KEC - - -Y (KTC2120)
Q308	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q309	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q401	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q404	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q405	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q501	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q502	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q503	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q504	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q514	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q515	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q5S1	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q705	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q706	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q7S1	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q801	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q802	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q804	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q901	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q902	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q903	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R100	0RD1504H632	RESISTOR,FIXED CARBON FILM, 1.5M OHM 1/2 W 5.00% MF10
R101	614-007A	RESISTOR,FIXED CEMENT, 2.7/2W CEMENT SMPS V
R104	0RS5602K619	RESISTOR,FIXED METAL OXIDE FILM, 56K OHM 2 W 5.00% TR
R105	0RD0472F608	RESISTOR,FIXED CARBON FILM, 47 OHM 1/6 W 5.00% TA26
R106	0RD1803F608	RESISTOR,FIXED CARBON FILM, 180K OHM 1/6 W 5.00% TA26
R107	0RD1803F608	RESISTOR,FIXED CARBON FILM, 180K OHM 1/6 W 5.00% TA26
R110	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R111	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R112	0RD2200F608	RESISTOR,FIXED CARBON FILM, 220 OHM 1/6 W 5.00% TA26
R113	0RD3901F608	RESISTOR,FIXED CARBON FILM, 3.9K OHM 1/6 W 5.00% TA26
R114	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R115	0RN3301F408	RESISTOR,FIXED METAL FILM, 3.3K OHM 1/6 W 1.00% TA26

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Location No. or Reference No.	TOSHIBA Part Number	Description
R116	0RN2701F408	RESISTOR,FIXED METAL FILM, 2.7K OHM 1/6 W 1.00% TA26
R117	0RD2700F608	RESISTOR,FIXED CARBON FILM, 270 OHM 1/6 W 5.00% TA26
R118	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R119	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R124	0RS0350K619	RESISTOR,FIXED METAL OXIDE FILM, 0.35 OHM 2 W 5.00% TR
R125	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R126	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R130	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R131	0RD2202F608	RESISTOR,FIXED CARBON FILM, 22K OHM 1/6 W 5.00% TA26
R151	0RD5601F608	RESISTOR,FIXED CARBON FILM, 5.6K OHM 1/6 W 5.00% TA26
R152	0RD5601F608	RESISTOR,FIXED CARBON FILM, 5.6K OHM 1/6 W 5.00% TA26
R153	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R154	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R155	0RD1802F608	RESISTOR,FIXED CARBON FILM, 18K OHM 1/6 W 5.00% TA26
R156	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R157	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R158	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R159	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R164	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R167	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R168	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R170	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R171	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R172	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R173	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R201	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R202	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R203	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R204	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R205	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R206	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R207	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R208	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R209	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R210	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R211	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R212	0RJ7503C677	RESISTOR,METAL GLAZE, 750K OHM 1/16 W 5% 1
R213	0RH3903C622	RESISTOR,METAL GLAZED(CHIP), 390K OHM 1 / 16 W 1608 5.00% D
R214	0RJ7503C677	RESISTOR,METAL GLAZE, 750K OHM 1/16 W 5% 1
R215	0RH3903C622	RESISTOR,METAL GLAZED(CHIP), 390K OHM 1 / 16 W 1608 5.00% D
R216	0RH0101C622	RESISTOR,METAL GLAZE, 1 OHM 1 / 16 W 1608
R217	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R218	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R220	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R221	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R231	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R232	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R233	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R234	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R235	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R236	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R237	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R238	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R239	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R240	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R241	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R242	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R243	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R244	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R245	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R246	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R251	0RH3302C622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 16 W 1608 5.00% D
R252	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R253	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R254	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R255	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R256	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R257	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R258	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R259	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R301	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R302	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R303	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R304	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R305	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R306	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R307	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R308	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R309	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R310	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R311	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R312	0RH6802D622	RESISTOR,METAL GLAZED(CHIP), 68K OHM 1 / 10 W 2012 5.00% D
R313	0RH0221D622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 10 W 2012 5.00% D
R314	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R315	0RH0472D622	RESISTOR,METAL GLAZED(CHIP), 47 OHM 1 / 10 W 2012 5.00% D

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Location No. or Reference No.	TOSHIBA Part Number	Description
R316	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R317	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R318	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R319	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R320	0RH1500D622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 10 W 2012 5.00% D
R321	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D
R322	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R324	0RH3303D622	RESISTOR,METAL GLAZED(CHIP), 330K OHM 1 / 10 W 2012 5.00% D
R325	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R326	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R327	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R328	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R329	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R330	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R331	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R332	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R333	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R334	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R335	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R336	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R337	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R338	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R339	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R340	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R342	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R343	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R344	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R345	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R346	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R347	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R348	0RH1504D622	RESISTOR,METAL GLAZED(CHIP), 1.5M OHM 1 / 10 W 2012 5.00% D
R349	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R350	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R351	0RH8203D622	RESISTOR,METAL GLAZED(CHIP), 820K OHM 1 / 10 W 2012 5.00% D
R352	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R353	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R3A2	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R401	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R402	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R403	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R404	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R405	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R407	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R408	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R409	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R410	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R411	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R412	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R413	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R414	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R415	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R416	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R417	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R418	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R419	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R420	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R421	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R422	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R423	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R424	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R425	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R426	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R427	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R501	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R502	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R503	0RH0471C622	RESISTOR,METAL GLAZED(CHIP), 4.7 OHM 1 / 16 W 1608 5.00% D
R504	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R505	0RH0471C622	RESISTOR,METAL GLAZED(CHIP), 4.7 OHM 1 / 16 W 1608 5.00% D
R506	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R507	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R508	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R509	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R510	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R511	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R512	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R513	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R514	0RH1203D622	RESISTOR,METAL GLAZED(CHIP), 120K OHM 1 / 10 W 2012 5.00% D
R515	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R516	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R517	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R518	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R519	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R520	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R521	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R522	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D

DVD VIDEO PLAYER SD-33VE		
Location No. or Reference No.	TOSHIBA Part Number	Description
R523	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R524	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R525	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R526	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R527	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R528	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R529	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R530	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R531	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R534	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R535	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R542	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R543	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R544	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R545	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R546	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R547	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R548	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R550	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R553	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R554	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R555	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R556	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R557	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R558	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R559	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R560	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R561	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R562	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R563	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R564	0RH1802C622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 16 W 1608 5.00% D
R565	0RH1802C622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 16 W 1608 5.00% D
R566	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R567	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R568	0RH6802D622	RESISTOR,METAL GLAZED(CHIP), 68K OHM 1 / 10 W 2012 5.00% D
R569	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R570	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R573	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R574	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R575	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R576	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R577	0RH4700C622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 16 W 1608 5.00% D
R578	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R579	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R580	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R581	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R582	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R583	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R584	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R585	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R586	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R587	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R589	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R591	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R5A2	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5A3	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5A5	0RH4703D622	RESISTOR,METAL GLAZED(CHIP), 470K OHM 1 / 10 W 2012 5.00% D
R5A7	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R5A9	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R5B3	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5B4	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5B5	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5C1	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C3	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R5C4	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R5C5	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C6	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C7	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C9	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R5E1	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R5K6	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5K7	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5K8	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5L1	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R5P2	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5P3	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5R8	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5S1	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R5S2	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R601	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R602	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R603	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R604	0RD5602F608	RESISTOR,FIXED CARBON FILM, 56K OHM 1/6 W 5.00% TA26
R605	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R606	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D

DVD VIDEO PLAYER SD-33VE		
Location No. or Reference No.	TOSHIBA Part Number	Description
R607	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R608	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R609	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R610	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R611	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R612	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R613	0RD1201F608	RESISTOR,FIXED CARBON FILM, 1.2K OHM 1/6 W 5.00% TA26
R614	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R615	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R616	0RD3301F608	RESISTOR,FIXED CARBON FILM, 3.3K OHM 1/6 W 5.00% TA26
R617	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R618	0RD2701F608	RESISTOR,FIXED CARBON FILM, 2.7K OHM 1/6 W 5.00% TA26
R619	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R630	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R631	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R633	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R641	0RD0752F608	RESISTOR,FIXED CARBON FILM, 75 OHM 1/6 W 5.00% TA26
R705	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R706	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R707	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R710	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R711	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R712	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R713	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R714	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R715	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R716	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R717	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R718	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R719	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R7S1	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R7V1	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R7V2	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R7V3	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R7V4	0RH5603D622	RESISTOR,METAL GLAZED(CHIP), 560K OHM 1 / 10 W 2012 5.00% D
R7V5	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R7V6	0RH5603D622	RESISTOR,METAL GLAZED(CHIP), 560K OHM 1 / 10 W 2012 5.00% D
R7V7	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R7V8	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R7V9	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R801	0RH3304D622	RESISTOR,METAL GLAZED(CHIP), 3.3M OHM 1 / 10 W 2012 5.00% D
R802	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R803	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R804	0RH3902D622	RESISTOR,METAL GLAZED(CHIP), 39K OHM 1 / 10 W 2012 5.00% D
R805	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R806	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R807	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R808	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R809	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R810	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R811	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R812	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R821	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R822	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R823	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R824	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R825	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R826	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R835	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R841	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R842	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R850	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R851	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R861	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R862	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R863	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R864	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R874	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R875	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R876	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R890	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R901	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R902	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R903	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R904	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R905	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R906	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R907	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R908	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R909	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R910	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R911	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R913	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R914	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R919	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D

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Location No. or Reference No.	TOSHIBA Part Number	Description
R920	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R921	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R922	0LCCE00004L	INDUCTOR,CHIP, 1UH , CHIP2012 CERAT
R923	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R924	0LCCE00004L	INDUCTOR,CHIP, 1UH , CHIP2012 CERAT
R925	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R926	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R927	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R928	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R929	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R930	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R931	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R932	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R933	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R934	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R935	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R937	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R938	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
RC601	6712R0838GA	REMOTE CONTROLLER RECEIVER, TSOP1238UQ1 TEMIC 8MM 37.9KHZ
RS501	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
RS502	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
SC901	6620RM0002J	JACK,SCART, DSAM-0121 DOOWON 2F-
SW601	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW602	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW603	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW604	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW605	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW606	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW607	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW608	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW609	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW610	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW611	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW901	6600R-SH18A	SWITCH,TACT, CSS-4206 CHANG SHIN
T101	6170RNGW12F	TRANSFORMER,SMPS[COI, EER3534, 580UH SAMWH
TU701	6700PFPG04A	TUNER, TCPL0601PD23C(SECAM,
V101	656-004C	VARISTOR, SVC681D-10A SAMHWA 4.O CUT
W714	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W901	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W902	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W903	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
X301	6202R2443AC	CRYSTAL,STANDARD, H49U KJE RADIAL 4.433709MHZ 15PPM SERPF TP
X501	6202R-BL06C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X502	6202R-DA01B	RESONATOR,CRYSTAL, CFS-308 CITIZEN 32.7
X751	529-021Q	CRYSTAL,STANDARD, 49U KJE RADIAL 18432000HZ 30PPM 16PF BK
ZD101	0DZ330009BF	DIODE,ZENER, GDZJ3.3B TP GRANDE D
ZD103	0DZ130009AA	DIODE,ZENERS, MTZ13A TP ROHM - - - - -
ZD104	0DZ300000MB	DIODE,ZENERS, UZ-30BSC 26MM PYUNG
ZD501	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -

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Location No. or Reference No.	TOSHIBA Part Number	Description
011A	6850R-JW14E	CABLE,FLAT, P=1.0 FFC UL2896(0.0
015A	4681R-1023E	MOTOR ASSEMBLY, LOADING (DI)
015B	4560R-0008A	PULLEY, MOTOR
015C	4680HP2001A	MOTOR(MECH), RF-300CH-11440(SHAFT 6.05L)M/C
024A	5006R-0044A	CAP, SKEW-T DP7C
024B	5006R-0043A	CAP, SKEW DP7C
052A	4980R-0023A	SUPPORTER, CAPSTAN(D35)
054A	4970R-0124B	SPRING, COIL D35 (RACK F/L)
10	4810R-0125A	BRACKET, CHASSIS
100	3301R-M022A	PLATE ASSEMBLY, TOP
100A	3300R-0184A	PLATE, GND
100B	3300R-M118A	PLATE, TOP(D35)
102	4970R-0130A	SPRING, COIL D35 (STOPPER)
109	5870R-0004A	OPENER, DOOR
11	3210R-M002A	FRAME, UP/DOWN MOLD DP7C
115	4510R-0042A	LEVER, SWITCH
116	4970R-0138A	SPRING, COIL D35 SWITCH
117	3300R-M137A	PLATE, SPRING CST
12	3041R-0037A	BASE ASSY, P2
13	3041R-0038A	BASE ASSY, P3
14	3041R-0039A	BASE ASSY, P4
15	5870R-0005A	OPENER, LID(D35)
16	3041R-0036A	BASE ASSEMBLY, A/C HEAD (ALPS)
17	4408R-0003A	REEL, S
18	4970R-0140A	SPRING, COIL RS D35
19	4421R-0008A	BRAKE ASSEMBLY, RS
2	4680R-B003B	MOTOR(MECH), DRUM VH4301 KUMAGAYA
20	4970R-0128A	SPRING, COIL D35 (TB)
21	4421R-0006A	BRAKE ASSY, T
22	4681R-0034C	MOTOR ASSEMBLY, DECK/MECHA FEED DP-7
23	3040R-0057A	BASE, LOADING
24	4261R-0024A	ARM ASSEMBLY, IDLER (H)
25	4470R-0130A	GEAR, MIDDLE DP7C
250	3110R-V004B	CASE, (COMBI-2) PRESS A288
26	3390R-0014A	TRAY, DISK
274	3300R-V032A	PLATE, VB602M PRESS SUS 0.2
276	4930R-0298B	HOLDER,SHELF, TIMER PWB(D+V-RIB CU
28	4370R-0082B	SHAFT, DECK/MECHA PU R DP-7
283	3580R-V054B	DOOR,CASE, VCR VB602CP MOLD CST
284	442-681A	SPRING, DOOR
285	3580R-T084A	DOOR,CASE, TRAY (TOSHIBA COMBI)
29	4261R-0019A	ARM ASSY, PINCH
3	4930R-0284A	HOLDER,SHELF, FPC(6CH)
30	4471R-0013C	GEAR ASSEMBLY, DECK/MECHA RACK DP-7
300	6410RCHP02B	POWER CORD, HIT-102/H0VHH2-F(WIT
31	4970R-0123A	SPRING, COIL TENSION(D35)
323	3111R-0089C	CASE ASSEMBLY, PRE-AMP (02-PAL)
330	3140R-V001B	CHASSIS, COMBI-2 PRESS PAL TY
4	4930R-0171A	HOLDER, CLAMP
401	1MEC0261518	SCREW MACHINE,PAN HE, #NAME?
402	1MPC0261418	SCREW MACHINE,PAN HEAD, #NAME?
405	1SZZR-0031B	SCREW,DRAWING, + 1 D2.6 L5.8 SWRCH1
406	1MEC0302018	SCREW MACHINE,PAN HEAD SPR W, #NAME?
409	1SZZR-0032B	SCREW,DRAWING, + 1 D2.6 L5.0 SWRCH1
410	1APF0262218	SCREW TAP TITE(B),PAN HEAD, #NAME?
429	1SZZR-0012A	SCREW,DRAWING, B-TITE
430	1SZZH-1003A	SCREW,DRAWING, + D2.0 6MM SWRCH16A/NIY 4.5MM 1.5MM MACHINE PAN PL
431	1SZZH-1007B	SCREW,DRAWING, + D2.0 6MM SWRCH16A/ZNBK 4MM 1.2MM TAPPING PAN NO
433	1SZZR-0050A	SCREW,DRAWING, + 1 D2.0 L4.5 SWRCH1
435	1SZZR-0011A	SCREW,DRAWING, MACHINE
452	353-051A	SCREW,DRAWING, SPECIAL
457	353-051E	SCREW,DRAWING, SPECIAL (3X12)
465	353-046K	SCREW,DRAWING, SPECIAL (3X10 B.K)
467	353-051G	SCREW,DRAWING, + 2 D3.0 L8.0 MSWR3/
51	4400R-0005A	BELT, CAPSTAN
517	1WZZR-0004D	WASHER,DRAWING, STOPPER
518	1WZZR-0004A	WASHER,DRAWING, STOPPER
52	4680R-A006A	MOTOR(MECH), CAPSTAN MCVC-035AA L
54	4470R-0100A	GEAR, RACK F/L
55	4470R-0097A	GEAR, DRIVE(D35)
56	4470R-0096A	GEAR, CAM(D35)
58	4421R-0007A	BRAKE ASSY, CAPSTAN
60	4510R-0040A	LEVER, F/R(D35)
61	4265R-0005A	CLUTCH ASSEMBLY, D35 (M)
64	4470R-0098A	GEAR, SECTOR(D35)
76	4510R-0047A	LEVER, SPRING
77	3300R-M116A	PLATE, SLIDER
78	4510R-0041A	LEVER, TENSION
79	3040R-0056A	BASE, TENSION(D35)
8	6850R-HG18Z	CABLE,FLAT, P=1.25 FFC UL2896(0.
801	3835RP0099F	INSTRUCTION ASSEMBLY, VCR VB602CPK.NA3GTT
802	3890R-H787L	BOX, VB602CP NA3GTT SWM3-
803	3920R-E080A	PACKING,CASING, VC6000_S 0.02 150 EP
806	6850R-CAA26	CABLE,COAXIAL, 1200M/M PAL-PAL DOUB
808	534-008C	BATTERY,MN, AAAM(R03) 1.5V 1PAIR(LOCAL)
810	6851RP0003F	CABLE ASSY,RF, CABLE ASSY,RF/SCART/

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Location No. or Reference No.	TOSHIBA Part Number	Description
812	6611R2G001A	PLUG ASSY, 2WAY RED/WHITE GLOBA
9	4260R-0038A	ARM, T/UP(D35)
900	6711R2N080C	REMOTE CONTROLLER AS, TOSHIBA VB602CP SE-R
A01	4861R-0016C	CLAMP ASSEMBLY, DECK/MECHA DISC DP-7
A02	3041R-M013C	BASE ASSEMBLY, MAIN DP-7C (DI)
A03	3041R-M016C	BASE ASSEMBLY, SLED DP-7C(7A) DI
A04	4811RF0038A	BRACKET ASSEMBLY, L/D(S)
A11	4471R-0005A	GEAR ASSY, P3
A12	4471R-0004A	GEAR ASSY, P2
A21	4931R-0047A	HOLDER ASSY, CST
A22	4471R-0006A	GEAR ASSY, RACK F/L
A23	4261R-0023A	ARM ASSY, F/L
A24	4510R-0046A	LEVER, ASSY SWITCH
A42	3501R-6412A	BOARD ASSEMBLY, VCR VB602M KEY
A43	3721R-F324D	PANEL ASSEMBLY,FRONT, VB602CP NA3GTT (SD-
A46	3501R-8119E	BOARD ASSEMBLY, VCR 2003 COMBI SCART
A46A	6885R-5003A	SUB PWB(PCB) ASSEMBL, 444503D7120560 00000
A48	6871R-7112C	PWB(PCB) ASSEMBLY,TO, 2003 POWER X360,FLD,
A49	3501R-6411A	BOARD ASSEMBLY, VCR VB602M TIMER
BC91	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BC92	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD01	636-004C	CORE (CIRC),BEAD, BEAD CORE BFS3550R2FD8,R T/P
BD101	0DD160000DA	DIODE,RECTIFIERS, S1WBA60 BK SHINDENGEN - 600V - - - -
C101	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C102	624-088L	CAPACITOR,DRAWING, 435D SUNIL ELECTRONI
C103	624-082C	CAPACITOR,FIXED ELECTROLYTIC, 100MF/400V SHL SMPS S/Y
C104	0CQ2232K409	CAPACITOR,FIXED FILM, 0.022UF S 50V 5% PE TP5
C105	0CQ1031Y519	CAPACITOR,FIXED FILM, 0.01UF D 630V 10% PE NI TP5
C106	624-087B	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 100P/1KV SMPS SAMHWA
C109	0CE1066K618	CAPACITOR,FIXED ELECTROLYTIC, 10UF SMS,SG 50V 20% FL TP 5
C110	0CG1020U630	CAPACITOR,SEMI CERAM, 1000PF 400V M E(Z5U)
C111	0CG2220U630	CAPACITOR,SEMI CERAMIC, 2200PF D 400V 20% E(Z5U) R
C112	0CN223AK948	CAPACITOR,FIXED TUBULAR(High dielectric), 0.022UF S 50V 80%,-20% F(Y5V) TA26
C117	0CE337EK630	CAPACITOR,AL.ELECTRO, 330UF KMG 50V M FM5
C121	0CE2276F638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 16V 20% FM5 TP 5
C123	0CE477BH630	CAPACITOR,FIXED ELECTROLYTIC, 470UF KME TYPE 25V 20% FM5 BULK
C126	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SMS,SG 25V 20% FM5 TP 5
C127	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC, 1000UF KME TYPE 16V 20% FM5 BULK
C128	0CE3376D638	CAPACITOR,FIXED ELECTROLYTIC, 330UF SMS,SG 10V 20% FM5 TP 5
C129	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC, 2200UF KME TYPE 16V 20% FM5 BULK
C130	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C131	624-082H	CAPACITOR,FIXED ELECTROLYTIC, CE 1000UF/10V SHL(10*12.5)T/P
C132	624-085D	CAPACITOR,FIXED ELECTROLYTIC, CE 47UF/50V KME (SMPS)
C133	0CQ1042K409	CAPACITOR,FIXED FILM, 0.1UF S 50V 5% PE TP5
C135	0CN4710K518	CAPACITOR,FIXED TUBULAR(High dielectric), 470PF D 50V 10% B(Y5P) TA26
C151	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C152	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C153	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C154	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C155	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C156	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C161	0CE4763F638	CAPACITOR,FIXED ELECTROLYTIC, 47000000PF SRE,SE 16V 20% FM5 TP 5
C163	624-087H	CAPACITOR,FIXED CERAMIC(High dielectric), HIGH-VOL 220PF/1KV CERAMIC
C201	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C202	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C203	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C206	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C207	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C208	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C211	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C212	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C213	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C214	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C216	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
C231	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C232	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C233	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C234	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C239	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C240	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C241	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C243	0CH4561K412	CAPACITOR,FIXED CERAMIC(High dielectric), 560PF 50V 5% NP0 1608 R/TP
C244	0CH4561K412	CAPACITOR,FIXED CERAMIC(High dielectric), 560PF 50V 5% NP0 1608 R/TP
C245	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C251	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C252	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C253	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C254	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C255	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C257	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C258	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C259	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C260	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C261	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C262	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP

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C263	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C264	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C265	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C266	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C267	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C268	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C269	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C270	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C271	0CH4391K412	CAPACITOR,FIXED CERAMIC(High dielectric), 390PF 50V 5% NP0 1608 R/TP
C272	0CH4391K412	CAPACITOR,FIXED CERAMIC(High dielectric), 390PF 50V 5% NP0 1608 R/TP
C273	0CH1333K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 50V 10% X7R(X) 1608 R/TP
C274	0CH4471K412	CAPACITOR,FIXED CERAMIC(High dielectric), 470PF 50V 5% NP0 1608 R/TP
C276	0CH4100K112	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 0.5 pF NP0 1608 R/TP
C277	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% X7R(X) 1608 R/TP
C278	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C279	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C280	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C281	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C282	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C283	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C291	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C292	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C293	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C295	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C296	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C297	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C298	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C301	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C302	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C303	0CH1122K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1200PF 50V 10% B(5YP) 2012 R/TP
C304	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C305	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C306	0CH1122K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1200PF 50V 10% B(5YP) 2012 R/TP
C307	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C308	0CH1153K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.015UF 50V 10% B(5YP) 2012 R/TP
C309	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C310	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C311	0CE4765K618	CAPACITOR,FIXED ELECTROLYTIC, 47UF SR,SV 50V 20% FL TP 5
C312	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C313	0CQ2232L559	CAPACITOR,FIXED FILM, 0.022UF S 63V 10% PP NI TP5
C314	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C315	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C316	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C317	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C318	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C319	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C320	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C321	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C322	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C323	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C324	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C325	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C326	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C327	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C328	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C329	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C330	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C331	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C333	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C334	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C335	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C336	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C337	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C338	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C339	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C340	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C341	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C342	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C343	0CH1473K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 10% B(5YP) 2012 R/TP
C345	0CH1563K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.056UF 50V 10% B(5YP) 2012 R/TP
C346	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C347	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C348	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C349	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C350	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C351	0CH4221K416	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 2012 R/TP
C353	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C355	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C356	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C357	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C358	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C359	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C361	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C362	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C363	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP

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C366	0CH1103K416	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 5% B(5YP) 2012 R/TP
C367	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C368	0CH1822K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 8200PF 50V 10% B(5YP) 2012 R/TP
C369	0CH4101K416	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 2012 R/TP
C370	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C371	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C372	0CH4820K416	CAPACITOR,FIXED CERAMIC(High dielectric), 82PF 50V 5% NP0 2012 R/TP
C374	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C375	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C376	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C377	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C401	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C402	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C403	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C404	0CH1105D942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 10V 80%,-20% Y5V(F) 1608 R/TP
C405	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C406	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C407	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C408	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C409	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C410	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C411	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C412	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C413	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C414	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C415	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C416	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C417	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C418	0CH4271K412	CAPACITOR,FIXED CERAMIC(High dielectric), 270PF 50V 5% NP0 1608 R/TP
C419	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C420	0CE1074F638	CAPACITOR,FIXED ELECTROLYTIC, 100UF SRA,SS 16V 20% FM5 TP 5
C421	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C422	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 1608 R/TP
C423	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C424	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C425	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C426	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C500	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C501	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C502	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C503	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C504	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C505	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C506	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C507	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% X7R(X) 1608 R/TP
C508	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C509	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C510	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C511	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C512	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C513	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C514	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C515	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C516	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C517	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C518	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C519	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C520	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C521	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C522	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C523	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC, 2.2UF SRA,SS 50V 20% FM5 TP 5
C524	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C525	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C526	0CE4764J638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 35V 20% FM5 TP 5
C527	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C528	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C530	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C531	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C532	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C533	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C534	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C535	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C536	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C537	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C538	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% X7R(X) 1608 R/TP
C539	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C540	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C541	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C542	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C543	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C544	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C545	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C546	0CE4764J638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 35V 20% FM5 TP 5
C547	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C551	0CH1333H516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.033UF 25V 10% B(5YP) 2012 R/TP

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C552	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C554	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C555	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C556	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C557	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C558	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C559	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C560	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C561	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C563	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C564	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C567	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C568	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C569	0CH4221K412	CAPACITOR,FIXED CERAMIC(High dielectric), 220PF 50V 5% NP0 1608 R/TP
C570	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C571	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C575	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C576	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C577	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C578	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C579	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C580	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C581	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C582	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C583	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C584	0CH4270K412	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 1608 R/TP
C585	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C586	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C587	0CH4101K412	CAPACITOR,FIXED CERAMIC(High dielectric), 100PF 50V 5% NP0 1608 R/TP
C589	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C590	0CE2274C638	CAPACITOR,FIXED ELECTROLYTIC, 220UF SRA,SS 6.3V 20% FM5 TP 5
C591	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C592	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C596	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C597	0CH4470K412	CAPACITOR,FIXED CERAMIC(High dielectric), 47PF 50V 5% NP0 1608 R/TP
C5A1	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C5A2	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5A3	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C5A4	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5A5	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C1	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C5C2	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C4	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C5	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C6	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C7	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C5C8	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5C9	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C5E0	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C5K1	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C5L1	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C5L6	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C5P1	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5P2	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C5S1	0CH4430K416	CAPACITOR,FIXED CERAMIC(High dielectric), 43PF 50V 5% NP0 2012 R/TP
C5S3	0CH1223K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.022UF 50V 10% B(5YP) 2012 R/TP
C601	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C602	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C603	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C604	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C605	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C606	0CH1104K942	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 1608 R/TP
C613	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C614	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C706	0CH4330K416	CAPACITOR,FIXED CERAMIC(High dielectric), 33PF 50V 5% NP0 2012 R/TP
C707	0CH4680K416	CAPACITOR,FIXED CERAMIC(High dielectric), 68PF 50V 5% NP0 2012 R/TP
C708	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C709	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C710	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC, 4.7UF SRA,SS 50V 20% FM5 TP 5
C712	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C713	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C714	0CH4560K416	CAPACITOR,FIXED CERAMIC(High dielectric), 56PF 50V 5% NP0 2012 R/TP
C715	0CH4050K016	CAPACITOR,FIXED CERAMIC(High dielectric), 5PF 50V O.25 pF NP0 2012 R/TP
C716	0CH4100K416	CAPACITOR,FIXED CERAMIC(High dielectric), 10PF 50V 5% NP0 2012 R/TP
C717	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C718	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C719	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C720	0CH1152K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1500PF 50V 10% B(5YP) 2012 R/TP
C721	0CH1392K566	CAPACITOR,FIXED CERAMIC(Temp.compensate), 3900PF 50V 10% X7R(X) 2012 R/TP
C722	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C723	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C726	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C727	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C728	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C729	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC, 3.3UF SRA,SS 50V 20% FM5 TP 5

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C730	0CH4150K416	CAPACITOR,FIXED CERAMIC(High dielectric), 15PF 50V 5% NP0 2012 R/TP
C731	0CH4090K116	CAPACITOR,FIXED CERA, 9PF 50V 0.5 pF NP0 2
C732	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C751	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C752	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C755	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C7M1	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C7M2	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C7M3	0CH4270K416	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 2012 R/TP
C7M6	0CH4270K416	CAPACITOR,FIXED CERAMIC(High dielectric), 27PF 50V 5% NP0 2012 R/TP
C7V1	0CE4764C638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 6.3V 20% FM5 TP 5
C7V2	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C7V3	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C7V4	0CH1473K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 80%,-20% Y5V(F) 2012 R/TP
C7V5	0CH1473K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.047UF 50V 80%,-20% Y5V(F) 2012 R/TP
C802	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C803	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C804	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C805	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C806	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C807	0CE4744K638	CAPACITOR,FIXED ELECTROLYTIC, 0.47UF SRA,SS 50V 20% FM5 TP 5
C808	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C809	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C810	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C811	0CH1105F946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1UF 16V 80%,-20% Y5V(F) 2012 R/TP
C812	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C813	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% B(5YP) 2012 R/TP
C814	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C815	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C816	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C817	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C818	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C819	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 6800PF 50V 10% B(5YP) 2012 R/TP
C820	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C821	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C822	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C823	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C824	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C825	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C826	0CH1103K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.01UF 50V 10% B(5YP) 2012 R/TP
C828	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C829	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C834	0CE4774F638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 16V 20% FM5 TP 5
C855	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C856	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C857	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C859	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC, 22UF SRA,SS 16V 20% FM5 TP 5
C860	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C861	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C863	0CE4764F638	CAPACITOR,FIXED ELECTROLYTIC, 47UF SRA,SS 16V 20% FM5 TP 5
C864	0CE1054K638	CAPACITOR,FIXED ELECTROLYTIC, 1UF SRA,SS 50V 20% FM5 TP 5
C869	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C870	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C871	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C884	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C885	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C886	0CE4774F638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SRA,SS 16V 20% FM5 TP 5
C887	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C888	0CE1064F638	CAPACITOR,FIXED ELECTROLYTIC, 10UF SRA,SS 16V 20% FM5 TP 5
C889	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C890	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C891	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C892	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C908	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C910	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C912	0CN1020K518	CAPACITOR,FIXED TUBULAR(High dielectric), 1000PF D 50V 10% B(Y5P) TA26
C915	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C916	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C921	0CH1102K516	CAPACITOR,FIXED CERAMIC(Temp.compensate), 1000PF 50V 10% B(5YP) 2012 R/TP
C931	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C932	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C933	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C934	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C935	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC, 470UF SR,SV 6.3V 20% FM5 TP 5
C938	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C941	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
C942	0CH1104K946	CAPACITOR,FIXED CERAMIC(Temp.compensate), 0.1UF 50V 80%,-20% Y5V(F) 2012 R/TP
CS501	6600M000002	SWITCH,PUSH, MPU11810MLB0 MIC DC
D101	0DD010009CA	DIODE,RECTIFIERS, EG01C TP SANKEN - - - - - -
D102	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D103	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D106	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D107	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D108	0DD010009AC	DIODE,RECTIFIERS, EU01W(R-FORM) TP SANKEN
D110	0DR302000AB	DIODE,RECTIFIERS, HER302 BK RECTRON DO201AD 100V 3A 200A 50SEC -

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D111	0DR158220AA	DIODE,RECTIFIERS, 1N5822 BK RECTRON DO201AD 40V 3A 80A - -
D113	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D114	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D115	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D117	0DR104009AB	DIODE,RECTIFIERS, RL104 R. TP GULF SEMICONDUCTOR LTD. - 400V 1A 30A
D118	0DR104510AA	DIODE,RECTIFIERS, B10A45V1 BK KEC TO220 45V 10A - - -
D121	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D301	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D401	0DSRM00118A	DIODE,SWITCHING, DAP202K T146 ROHM R/
D502	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D509	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D601	0DR104009BA	DIODE,RECTIFIERS, RL104F TP RECTRON - 400V 1A 30A 100NSEC -
D801	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D802	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
D902	0DD133009AA	DIODE,SWITCHING, 1SS133 TP ROHM KOREA - - - - - -
DG601	6302R-V128A	DIGITRON, 11-MT-139GK FUTABA S
ES501	4931R-0050C	HOLDER ASSEMBLY, END (DI)
ES502	4931R-0050C	HOLDER ASSEMBLY, END (DI)
F101	0FS1601B51D	FUSE,SLOW BLOW, 1600MA 250 V 5.2X20
F102	GIRH200000B	IC,ROHM, ICP-N20 T104 TP IC D
F501	6200JB8010V	FILTER(CIRC),EMC, LFA20-2A1E473MT MITS
F8A1	6200HJC901A	FILTER(CIRC),EMI, CFI06B1H101MF SAMWHA TP 2.5K/TP
FL301	633-032K	COIL,CAN, BIAC OSC,1CHIP 5V(KS-75M)
IC101	0IPMGSK001A	IC,POWER MANAGEMENT, STR-G6351L SANKEN 5P
IC102	657-063A	SENSOR, LTV-817B,PHOTO COUPLER(LITEON)
IC103	0IKE431000A	IC,KEC, KIA431 - - - -
IC151	0IPMGKE008B	IC,POWER MANAGEMENT, KIA78R08PI CU KEC 4P
IC152	0IPMGFA046A	IC,POWER MANAGEMENT, KA278R33TSTU FAIRCHI
IC201	0ILNRNF006A	IC,LINEAR, MT1336E MEDIATEK INC
IC202	0IPRPSA010A	IC,PERIPHERALS, LA6560-A-TE-L SANYO
IC301	0ILNRSA005B	IC,LINEAR, LA71750EM SANYO 100P
IC3F1A	6957R-609AB	PROGRAM, TOSHIBA (MTK) DVD PR
IC401	0IPRPCI003B	IC,PERIPHERALS, CS4391-KZR CIRRUS LO
IC402	0IJR458000B	IC,JRC, NJM4580M 8,DMP8 TP OP AMP 2K/REEL
IC501	0ILNRNF007A	IC,LINEAR, MT1379DE MEDIATEK IN
IC502	0IMMREB006A	IC,MEMORIES, M12L16161A-7T-TI ELI
IC503	0IAL241600B	IC,ATMEL, AT24C16 - - - -
IC504	0IKE703100A	IC,KEC, KIA7031P 3P 3.1V RESET(TAPING) - - - -
IC505	0IKE704200B	IC,KEC, KIA7042P(AT) TO-92 4.2V RESET - - - -
IC510	0IFA742440F	IC,FAIRCHILD, MM74HCT244SJ 20P SOI
IC5A1	0IMMRBA001A	IC,MEMORIES, A29L800TV-70 AMIC TE
IC5C1	0IPRPMT008A	IC,PERIPHERALS, MM1623XFBE MITSUMI 2
IC601	0IPRPNE001A	IC,PERIPHERALS, UPD16315GB-3BS NEC 4
IC751	0IIT341700B	IC,ITT, MSP3417D-QG QFP44 BK NICAM+A2 -
IC7V1	0ILNRMN001A	IC,LINEAR, SDA5650 MICRONAS 14
IC801	0IPH960500A	IC,PHILIPS, TDA9605H QFP44 BK HIFI AMP+HIFI+S/W
IC802	0IMT144300A	IC,MITSUMI, MM1443XJ SSOP-34 TP CANAL S/W
J806	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
JK601	572-034K	JACK,RCA, BJP-303S-04(YL),AU-PLATED
JK602	572-034J	JACK,RCA, BJP-303S-03(WH),AU-PLATED
JK603	572-034H	JACK,RCA, BJP-303S-02(RED),AU-PLATED
JK902	6612J00025G	JACK,RCA, RCA/DIN-38(9PIN)SILV
JK903	6612K00003A	JACK,FIBER OPTIC, PLT131/T5/6 EVERLIGH
L102	616-145P	FILTER(CIRC),DRAWING, LFSQ2215V4-04220B SA
L122	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L123	633-088G	COIL,CHOKE, CHOCK(22MH) TP 5MM
L125	633-088D	COIL,CHOKE, CHOCK ,20UH,LEAD CUT
L201	0LR0102J025	INDUCTOR,RADIAL LEAD, 10UH 5% TP 4 X 5 TR5 -
L202	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L203	0LR0102J025	INDUCTOR,RADIAL LEAD, 10UH 5% TP 4 X 5 TR5 -
L204	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L231	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L251	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L261	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L262	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L264	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L265	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L301	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L302	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L303	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L304	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L305	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L307	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L401	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L402	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L403	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L501	0LA0122K018	INDUCTOR,AXIAL LEAD, 12UH 10% TP 2.3 X 3.4 TA26 -
L502	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L503	0LR1000J0N5	INDUCTOR,RADIAL LEAD, 100UH 5% TP 3X5 TR5 -
L504	0LR0102J0N5	INDUCTOR,RADIAL LEAD, 10UH 5% TP 3X5 TR5
L505	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L506	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L507	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L508	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L5C1	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL

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L5S1	0LA0332K018	INDUCTOR,AXIAL LEAD, 33UH 10% TP 2.3 X 3.4 TA26 -
L601	0LR8200J025	INDUCTOR,RADIAL LEAD, 820UH 5% TP 4 X 5 TR5 -
L602	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L603	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L613	6200HJC102A	FILTER(CIRC),EMI, HB-1M2012-102JT CERATECH TP 3K/REEL
L701	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L702	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L704	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L705	0LR0102K035	INDUCTOR,RADIAL LEAD, 10UH 10% TP 6 X 6 TR5 -
L706	0LA0821K018	INDUCTOR,AXIAL LEAD, 8.2UH 10% TP 2.3 X 3.4 TA26 -
L7M1	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L7V1	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L801	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L803	0LR1000K035	INDUCTOR,RADIAL LEAD, 100UH 10% TP 6 X 6 TR5 -
L901	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L902	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L903	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L904	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L905	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L906	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L907	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L908	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L909	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
L910	0LA1000K018	INDUCTOR,AXIAL LEAD, 100UH 10% TP 2.3 X 3.4 TA26 -
LD501	4931R-0017C	HOLDER ASSY, LED(DI-CKD)LOCAL
LED601	0DL112000AK	LED, DL-11S2GNS(SUPPER,GREEN,03)KOC
LED602	0DL342009DA	LED, SLR-342YY TP ROHM YE
MS501	6600JB8005B	SWITCH,MODE, NON 5V 1MA VERTICAL
Q150	0TR115100AA	TRANSISTOR,BIPOLARS, KSB1151-Y BK SAMSUNG - TO-126
Q153	0TR220309AF	TRANSISTOR,BIPOLARS, SRA2203 TP AUK TO92 22K,22K
Q154	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q155	0TR141409AA	TRANSISTOR,BIPOLARS, KTD1414(TO220IS) CUTING TP KEC - -
Q156	0TR320509AB	TRANSISTOR,BIPOLARS, KTC3205-TP-Y (KTC2236A)KEC
Q161	0TR126809BA	TRANSISTOR,BIPOLARS, KTA1268-BL TP KEC - -
Q162	0TR534309BA	TRANSISTOR,BIPOLARS, 2SC5343-L TP AUK TO92 -
Q173	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q201	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q202	0TRRH80042A	TRANSISTOR,BIPOLARS, 2SK3018 T106 ROHM KO
Q203	0TRRH80042A	TRANSISTOR,BIPOLARS, 2SK3018 T106 ROHM KO
Q204	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q205	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q301	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q302	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q303	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q304	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q305	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q306	0TR320309AA	TRANSISTOR,BIPOLARS, KTC3203 TP KEC - - -Y (KTC2120)
Q308	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q309	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q401	0TR103709BB	TRANSISTOR,BIPOLARS, 2SA1037K-Q CHIP TP ROHM - -
Q404	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q405	0TR103009AC	TRANSISTOR,BIPOLARS, KRA103S-T1(PC)22-22 CHIP TP KEC - -
Q501	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q502	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q503	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q504	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q514	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q515	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q5S1	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q705	0TR127309AA	TRANSISTOR,BIPOLARS, KTA1273 TP KEC TO92 -Y(KTA966A) L PNP
Q706	0TR103009AA	TRANSISTOR,BIPOLARS, CHIP KRC103S-T1(NC)22-22 TP KEC - -
Q801	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q802	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q804	0TR150409AC	TRANSISTOR,BIPOLARS, KTA1504 TP KEC - -GR-T1(ASG) CHIP
Q901	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q902	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
Q903	0TR387509AC	TRANSISTOR,BIPOLARS, CHIP KTC3875S-GR-T1(ALG) TP KEC - -
R100	0RD1504H632	RESISTOR,FIXED CARBON FILM, 1.5M OHM 1/2 W 5.00% MF10
R101	614-007A	RESISTOR,FIXED CEMENT, 2.7/2W CEMENT SMPS V
R104	0RS5602K619	RESISTOR,FIXED METAL OXIDE FILM, 56K OHM 2 W 5.00% TR
R105	0RD0472F608	RESISTOR,FIXED CARBON FILM, 47 OHM 1/6 W 5.00% TA26
R106	0RD1803F608	RESISTOR,FIXED CARBON FILM, 180K OHM 1/6 W 5.00% TA26
R107	0RD1803F608	RESISTOR,FIXED CARBON FILM, 180K OHM 1/6 W 5.00% TA26
R110	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R111	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R112	0RD2200F608	RESISTOR,FIXED CARBON FILM, 220 OHM 1/6 W 5.00% TA26
R113	0RD3901F608	RESISTOR,FIXED CARBON FILM, 3.9K OHM 1/6 W 5.00% TA26
R114	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R115	0RN3301F408	RESISTOR,FIXED METAL FILM, 3.3K OHM 1/6 W 1.00% TA26
R116	0RN2701F408	RESISTOR,FIXED METAL FILM, 2.7K OHM 1/6 W 1.00% TA26
R117	0RD2700F608	RESISTOR,FIXED CARBON FILM, 270 OHM 1/6 W 5.00% TA26
R118	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R119	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R124	0RS0350K619	RESISTOR,FIXED METAL OXIDE FILM, 0.35 OHM 2 W 5.00% TR
R125	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26

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R126	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R130	0RD1003F608	RESISTOR,FIXED CARBON FILM, 100K OHM 1/6 W 5.00% TA26
R131	0RD2202F608	RESISTOR,FIXED CARBON FILM, 22K OHM 1/6 W 5.00% TA26
R151	0RD5601F608	RESISTOR,FIXED CARBON FILM, 5.6K OHM 1/6 W 5.00% TA26
R152	0RD5601F608	RESISTOR,FIXED CARBON FILM, 5.6K OHM 1/6 W 5.00% TA26
R153	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R154	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R155	0RD1802F608	RESISTOR,FIXED CARBON FILM, 18K OHM 1/6 W 5.00% TA26
R156	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R157	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R158	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R159	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R164	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R167	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R168	0RD0222F608	RESISTOR,FIXED CARBON FILM, 22 OHM 1/6 W 5.00% TA26
R170	0RD1002F608	RESISTOR,FIXED CARBON FILM, 10K OHM 1/6 W 5.00% TA26
R171	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R172	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R173	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R201	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R202	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R203	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R204	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R205	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R206	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R207	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R208	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R209	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R210	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R211	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R212	0RJ7503C677	RESISTOR,METAL GLAZE, 750K OHM 1/16 W 5% 1
R213	0RH3903C622	RESISTOR,METAL GLAZED(CHIP), 390K OHM 1 / 16 W 1608 5.00% D
R214	0RJ7503C677	RESISTOR,METAL GLAZE, 750K OHM 1/16 W 5% 1
R215	0RH3903C622	RESISTOR,METAL GLAZED(CHIP), 390K OHM 1 / 16 W 1608 5.00% D
R216	0RH0101C622	RESISTOR,METAL GLAZE, 1 OHM 1 / 16 W 1608
R217	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R218	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R220	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R221	0RH0272C622	RESISTOR,METAL GLAZED(CHIP), 27 OHM 1 / 16 W 1608 5.00% D
R231	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R232	0RH2201C622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 16 W 1608 5.00% D
R233	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R234	0RH0221C622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 16 W 1608 5.00% D
R235	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R236	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R237	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R238	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R239	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R240	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R241	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R242	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R243	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R244	0RH1502C622	RESISTOR,METAL GLAZED(CHIP), 15K OHM 1 / 16 W 1608 5.00% D
R245	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R246	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R251	0RH3302C622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 16 W 1608 5.00% D
R252	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R253	0RH2702C622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 16 W 1608 5.00% D
R254	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R255	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R256	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R257	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R258	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R259	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R301	0RH5602D622	RESISTOR,METAL GLAZED(CHIP), 56K OHM 1 / 10 W 2012 5.00% D
R302	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R303	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R304	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R305	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R306	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R307	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R308	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R309	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R310	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R311	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R312	0RH6802D622	RESISTOR,METAL GLAZED(CHIP), 68K OHM 1 / 10 W 2012 5.00% D
R313	0RH0221D622	RESISTOR,METAL GLAZED(CHIP), 2.2 OHM 1 / 10 W 2012 5.00% D
R314	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R315	0RH0472D622	RESISTOR,METAL GLAZED(CHIP), 47 OHM 1 / 10 W 2012 5.00% D
R316	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R317	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R318	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R319	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R320	0RH1500D622	RESISTOR,METAL GLAZED(CHIP), 150 OHM 1 / 10 W 2012 5.00% D
R321	0RH1201D622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 10 W 2012 5.00% D

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Location No. or Reference No.	TOSHIBA Part Number	Description
R322	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R324	0RH3303D622	RESISTOR,METAL GLAZED(CHIP), 330K OHM 1 / 10 W 2012 5.00% D
R325	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R326	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R327	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R328	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R329	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R330	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R331	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R332	0RH4702D622	RESISTOR,METAL GLAZED(CHIP), 47K OHM 1 / 10 W 2012 5.00% D
R333	0RH3901D622	RESISTOR,METAL GLAZED(CHIP), 3.9K OHM 1 / 10 W 2012 5.00% D
R334	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R335	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R336	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R337	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R338	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R339	0RH2700D622	RESISTOR,METAL GLAZED(CHIP), 270 OHM 1 / 10 W 2012 5.00% D
R340	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R342	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R343	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R344	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R345	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R346	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R347	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R348	0RH1504D622	RESISTOR,METAL GLAZED(CHIP), 1.5M OHM 1 / 10 W 2012 5.00% D
R349	0RH1801D622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 10 W 2012 5.00% D
R350	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R351	0RH8203D622	RESISTOR,METAL GLAZED(CHIP), 820K OHM 1 / 10 W 2012 5.00% D
R352	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R353	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R3A2	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R401	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R402	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R403	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R404	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R405	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R407	0RH5601C622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 16 W 1608 5.00% D
R408	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R409	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R410	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R411	0RH7501C622	RESISTOR,METAL GLAZED(CHIP), 7.5K OHM 1 / 16 W 1608 5.00% D
R412	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R413	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R414	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R415	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R416	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R417	0RH4701C622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 16 W 1608 5.00% D
R418	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R419	0RH8201C622	RESISTOR,METAL GLAZED(CHIP), 8.2K OHM 1 / 16 W 1608 5.00% D
R420	0RH1801C622	RESISTOR,METAL GLAZED(CHIP), 1.8K OHM 1 / 16 W 1608 5.00% D
R421	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R422	0RH3300C622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 16 W 1608 5.00% D
R423	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R424	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R425	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R426	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R427	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R501	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R502	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R503	0RH0471C622	RESISTOR,METAL GLAZED(CHIP), 4.7 OHM 1 / 16 W 1608 5.00% D
R504	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R505	0RH0471C622	RESISTOR,METAL GLAZED(CHIP), 4.7 OHM 1 / 16 W 1608 5.00% D
R506	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R507	0RH1501C622	RESISTOR,METAL GLAZED(CHIP), 1.5K OHM 1 / 16 W 1608 5.00% D
R508	0RH1003C622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 16 W 1608 5.00% D
R509	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R510	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R511	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R512	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R513	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R514	0RH1203D622	RESISTOR,METAL GLAZED(CHIP), 120K OHM 1 / 10 W 2012 5.00% D
R515	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R516	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R517	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R518	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R519	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R520	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R521	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R522	0RH0332C622	RESISTOR,METAL GLAZED(CHIP), 33 OHM 1 / 16 W 1608 5.00% D
R523	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R524	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R525	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D
R526	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R527	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R528	0RH1201C622	RESISTOR,METAL GLAZED(CHIP), 1.2K OHM 1 / 16 W 1608 5.00% D

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Location No. or Reference No.	TOSHIBA Part Number	Description
R529	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R530	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R531	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R534	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R535	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R542	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R543	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R544	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R545	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R546	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R547	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R548	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R550	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R553	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R554	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R555	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R556	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R557	0RH2702D622	RESISTOR,METAL GLAZED(CHIP), 27K OHM 1 / 10 W 2012 5.00% D
R558	0RH2202D622	RESISTOR,METAL GLAZED(CHIP), 22K OHM 1 / 10 W 2012 5.00% D
R559	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R560	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R561	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R562	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R563	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R564	0RH1802C622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 16 W 1608 5.00% D
R565	0RH1802C622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 16 W 1608 5.00% D
R566	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R567	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R568	0RH6802D622	RESISTOR,METAL GLAZED(CHIP), 68K OHM 1 / 10 W 2012 5.00% D
R569	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R570	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R573	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R574	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R575	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R576	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R577	0RH4700C622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 16 W 1608 5.00% D
R578	0RH1000C622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 16 W 1608 5.00% D
R579	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R580	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R581	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R582	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R583	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R584	0RH0222C622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 16 W 1608 5.00% D
R585	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R586	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R587	0RH1100C622	RESISTOR,METAL GLAZED(CHIP), 110 OHM 1 / 16 W 1608 5.00% D
R589	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R591	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R5A2	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5A3	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5A5	0RH4703D622	RESISTOR,METAL GLAZED(CHIP), 470K OHM 1 / 10 W 2012 5.00% D
R5A7	0RH1002C622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 16 W 1608 5.00% D
R5A9	0RH1001C622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 16 W 1608 5.00% D
R5B3	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5B4	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5B5	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5C1	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C3	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R5C4	0RH1500C422	RESISTOR,METAL GLAZE, 150 OHM 1 / 16 W 160
R5C5	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C6	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C7	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5C9	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R5E1	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R5K6	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5K7	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5K8	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R5L1	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R5P2	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5P3	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R5R8	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R5S1	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R5S2	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R601	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R602	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R603	0RD1001F608	RESISTOR,FIXED CARBON FILM, 1K OHM 1/6 W 5.00% TA26
R604	0RD5602F608	RESISTOR,FIXED CARBON FILM, 56K OHM 1/6 W 5.00% TA26
R605	0RD3300F608	RESISTOR,FIXED CARBON FILM, 330 OHM 1/6 W 5.00% TA26
R606	0RH0752C622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 16 W 1608 5.00% D
R607	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R608	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R609	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R610	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R611	0RH0000C622	RESISTOR,METAL GLAZE, 0 OHM 1 / 16 W 1608
R612	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26

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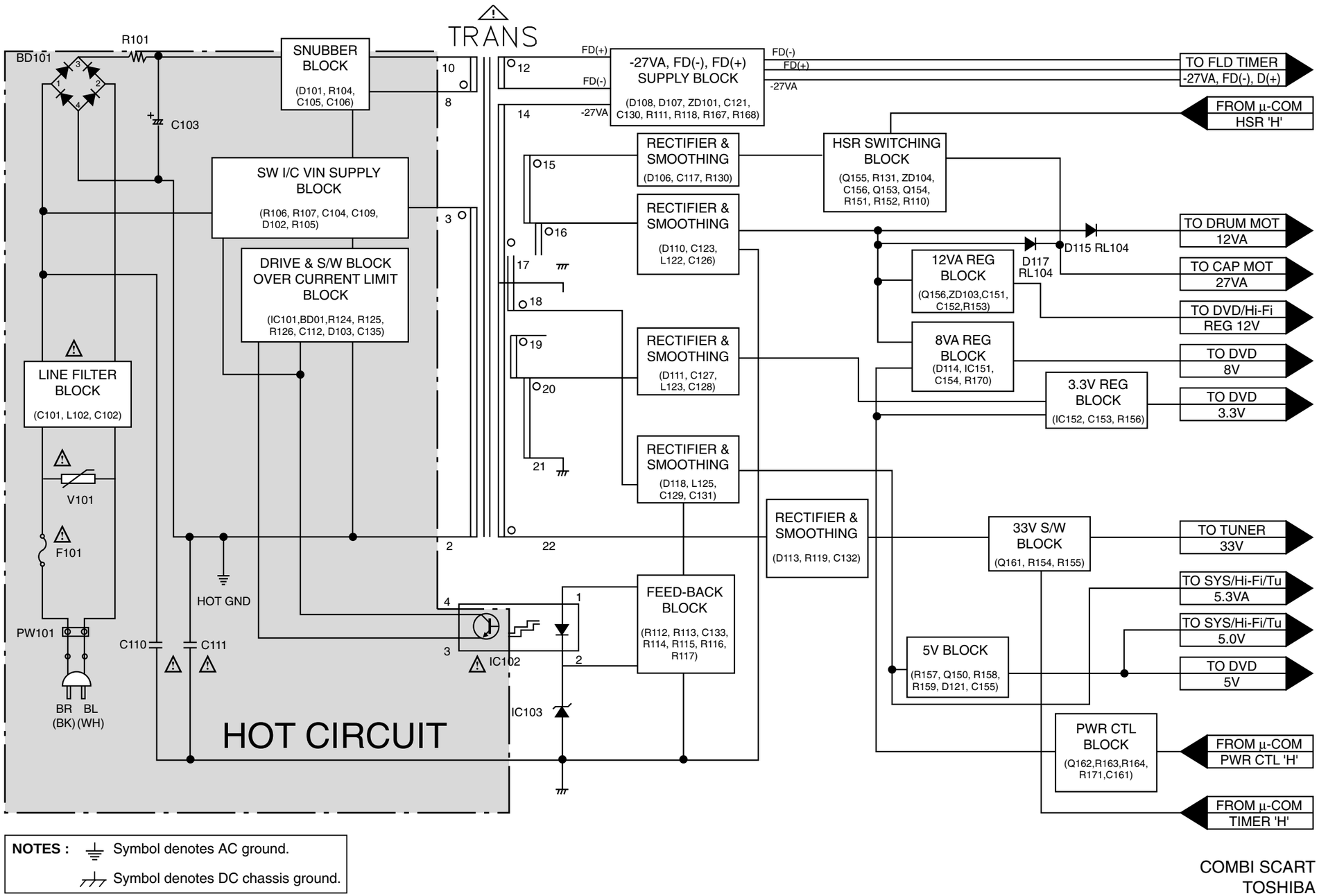
Location No. or Reference No.	TOSHIBA Part Number	Description
R613	0RD1201F608	RESISTOR,FIXED CARBON FILM, 1.2K OHM 1/6 W 5.00% TA26
R614	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R615	0RD2201F608	RESISTOR,FIXED CARBON FILM, 2.2K OHM 1/6 W 5.00% TA26
R616	0RD3301F608	RESISTOR,FIXED CARBON FILM, 3.3K OHM 1/6 W 5.00% TA26
R617	0RD4701F608	RESISTOR,FIXED CARBON FILM, 4.7K OHM 1/6 W 5.00% TA26
R618	0RD2701F608	RESISTOR,FIXED CARBON FILM, 2.7K OHM 1/6 W 5.00% TA26
R619	0RD1501F608	RESISTOR,FIXED CARBON FILM, 1.5K OHM 1/6 W 5.00% TA26
R630	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R631	0RD1500F608	RESISTOR,FIXED CARBON FILM, 150 OHM 1/6 W 5.00% TA26
R633	0RD6800F608	RESISTOR,FIXED CARBON FILM, 680 OHM 1/6 W 5.00% TA26
R641	0RD0752F608	RESISTOR,FIXED CARBON FILM, 75 OHM 1/6 W 5.00% TA26
R705	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R706	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R707	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R710	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R711	0RH3301D622	RESISTOR,METAL GLAZED(CHIP), 3.3K OHM 1 / 10 W 2012 5.00% D
R712	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R713	0RH5601D622	RESISTOR,METAL GLAZED(CHIP), 5.6K OHM 1 / 10 W 2012 5.00% D
R714	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R715	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R716	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R717	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R718	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R719	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R7M1	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R7M2	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R7M4	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R7M5	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R7V1	0RH1004D622	RESISTOR,METAL GLAZED(CHIP), 1M OHM 1 / 10 W 2012 5.00% D
R7V2	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R7V3	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R7V4	0RH5603D622	RESISTOR,METAL GLAZED(CHIP), 560K OHM 1 / 10 W 2012 5.00% D
R7V5	0RH6801D622	RESISTOR,METAL GLAZED(CHIP), 6.8K OHM 1 / 10 W 2012 5.00% D
R7V6	0RH5603D622	RESISTOR,METAL GLAZED(CHIP), 560K OHM 1 / 10 W 2012 5.00% D
R7V7	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R7V8	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R7V9	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R801	0RH3304D622	RESISTOR,METAL GLAZED(CHIP), 3.3M OHM 1 / 10 W 2012 5.00% D
R802	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R803	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R804	0RH3902D622	RESISTOR,METAL GLAZED(CHIP), 39K OHM 1 / 10 W 2012 5.00% D
R805	0RH2701D622	RESISTOR,METAL GLAZED(CHIP), 2.7K OHM 1 / 10 W 2012 5.00% D
R806	0RH3302D622	RESISTOR,METAL GLAZED(CHIP), 33K OHM 1 / 10 W 2012 5.00% D
R807	0RH4700D622	RESISTOR,METAL GLAZED(CHIP), 470 OHM 1 / 10 W 2012 5.00% D
R808	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R809	0RH1802D622	RESISTOR,METAL GLAZED(CHIP), 18K OHM 1 / 10 W 2012 5.00% D
R810	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R811	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R812	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R821	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R822	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R823	0RH2201D622	RESISTOR,METAL GLAZED(CHIP), 2.2K OHM 1 / 10 W 2012 5.00% D
R824	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R825	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R826	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R835	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R841	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R842	0RH3300D622	RESISTOR,METAL GLAZED(CHIP), 330 OHM 1 / 10 W 2012 5.00% D
R850	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R851	0RH1000D622	RESISTOR,METAL GLAZED(CHIP), 100 OHM 1 / 10 W 2012 5.00% D
R861	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R862	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R863	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R864	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R874	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R875	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R876	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R890	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R901	0RH1202D622	RESISTOR,METAL GLAZED(CHIP), 12K OHM 1 / 10 W 2012 5.00% D
R902	0RH1002D622	RESISTOR,METAL GLAZED(CHIP), 10K OHM 1 / 10 W 2012 5.00% D
R903	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R904	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R905	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R906	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R907	0RH5600D622	RESISTOR,METAL GLAZED(CHIP), 560 OHM 1 / 10 W 2012 5.00% D
R908	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R909	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R910	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R911	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R913	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R914	0RH0752D622	RESISTOR,METAL GLAZED(CHIP), 75 OHM 1 / 10 W 2012 5.00% D
R919	0RH4701D622	RESISTOR,METAL GLAZED(CHIP), 4.7K OHM 1 / 10 W 2012 5.00% D
R920	0RH6800D622	RESISTOR,METAL GLAZED(CHIP), 680 OHM 1 / 10 W 2012 5.00% D
R921	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R922	0LCCE00004L	INDUCTOR,CHIP, 1UH , CHIP2012 CERAT

DVD VIDEO PLAYER SD-33VL		
Location No. or Reference No.	TOSHIBA Part Number	Description
R923	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R924	0LCCE00004L	INDUCTOR,CHIP, 1UH , CHIP2012 CERAT
R925	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R926	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R927	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R928	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R929	0RH0000D622	RESISTOR,METAL GLAZED(CHIP), 0 OHM 1 / 10 W 2012 5.00% D
R930	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R931	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R932	0RH2200D622	RESISTOR,METAL GLAZED(CHIP), 220 OHM 1 / 10 W 2012 5.00% D
R933	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R934	0RH1003D622	RESISTOR,METAL GLAZED(CHIP), 100K OHM 1 / 10 W 2012 5.00% D
R935	0RH1001D622	RESISTOR,METAL GLAZED(CHIP), 1K OHM 1 / 10 W 2012 5.00% D
R937	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
R938	0RH0222D622	RESISTOR,METAL GLAZED(CHIP), 22 OHM 1 / 10 W 2012 5.00% D
RC601	6712R0838GA	REMOTE CONTROLLER RECEIVER, TSOP1238UQ1 TEMIC 8MM 37.9KHZ
RS501	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
RS502	6500RAB003A	SENSOR, SG-260 KODENSHI D33 REEL SENSOR
SC901	6620RM0002J	JACK,SCART, DSAM-0121 DOOWON 2F-
SW601	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW602	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW603	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW604	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW605	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW606	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW607	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW608	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW609	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW610	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW611	556-219B	SWITCH,TACT, THVV502GAA POSTECH NON 12V 5A VERTICAL 160G
SW901	6600R-SH18A	SWITCH,TACT, CSS-4206 CHANG SHIN
T101	6170RNGW12F	TRANSFORMER,SMPS[COI, EER3534, 580UH SAMWH
TU701	6700PFPL06F	TUNER, TADC-M401D(GKI,LGIT)
V101	656-004C	VARISTOR, SVC681D-10A SAMHWA 4.O CUT
W714	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W901	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W902	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
W903	0LA0101K018	INDUCTOR,AXIAL LEAD, 1UH 10% TP 2.3 X 3.4 TA26 -
X301	6202R2443AC	CRYSTAL,STANDARD, H49U KJE RADIAL 4.433709MHZ 15PPM SERPF TP
X501	6202R-BL06C	CRYSTAL,STANDARD, HC-49/S BUBANG AXIAL
X502	6202R-DA01B	RESONATOR,CRYSTAL, CFS-308 CITIZEN 32.7
X751	529-021Q	CRYSTAL,STANDARD, 49U KJE RADIAL 18432000HZ 30PPM 16PF BK
ZD101	0DZ330009BF	DIODE,ZENER, GDZJ3.3B TP GRANDE D
ZD103	0DZ130009AA	DIODE,ZENERS, MTZ13A TP ROHM - - - - -
ZD104	0DZ300000MB	DIODE,ZENERS, UZ-30BSC 26MM PYUNG
ZD501	0DZ560009CA	DIODE,ZENERS, MTZ5.6B TP ROHM - - - - -

TOSHIBA CORPORATION
1-1, SHIBAURA 1−CHOME,MINATO−KU, TOKYO 105 − 8001,JAPAN

BLOCK DIAGRAMS

1. POWER(SMPS) BLOCK DIAGRAM

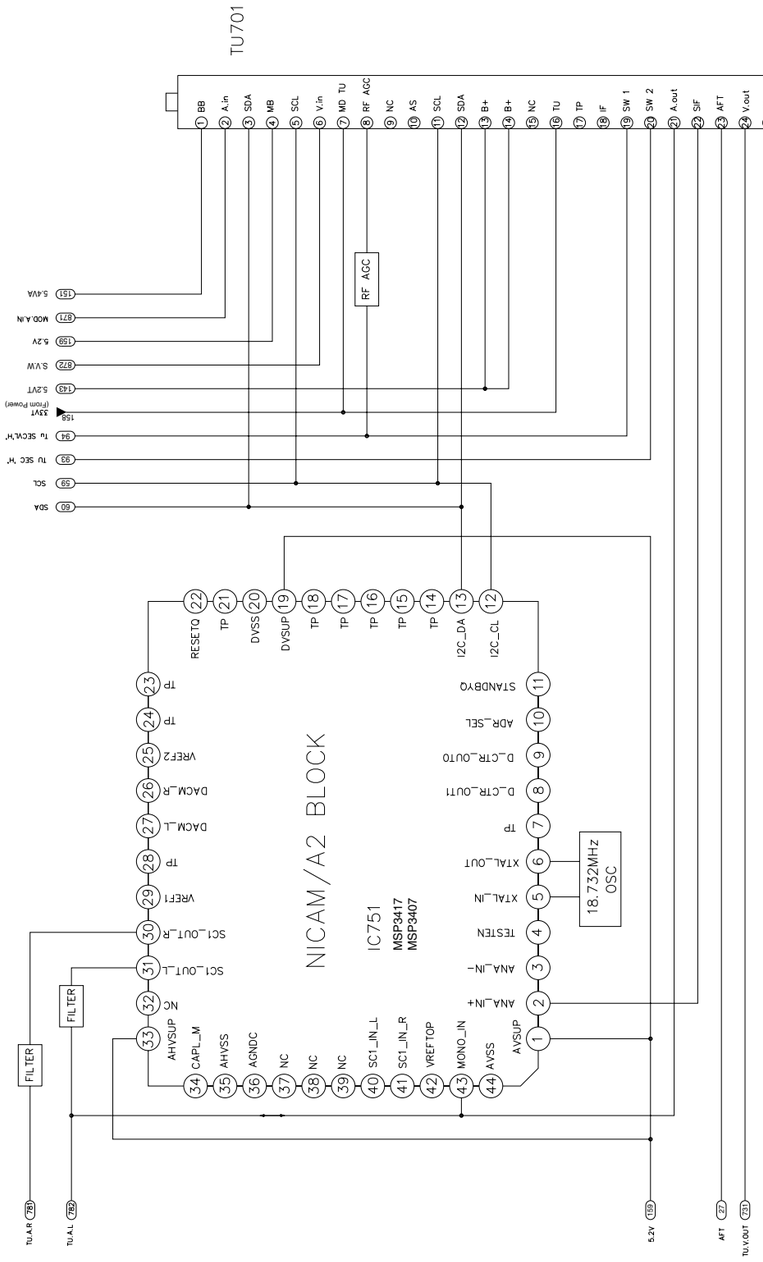


NOTES : Symbol denotes AC ground.

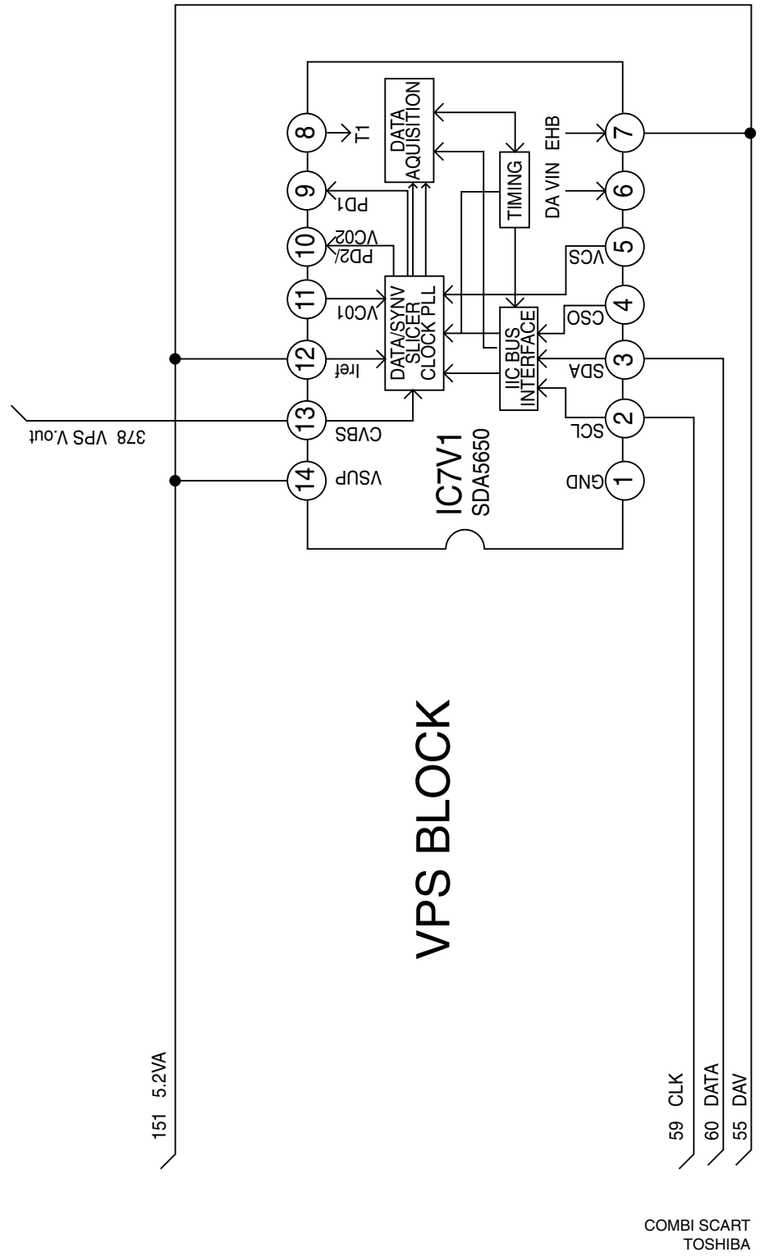
Symbol denotes DC chassis ground.

COMBI SCART
TOSHIBA

2. Tu/IF, NICAM & A2 BLOCK DIAGRAM



3. VPS BLOCK DIAGRAM

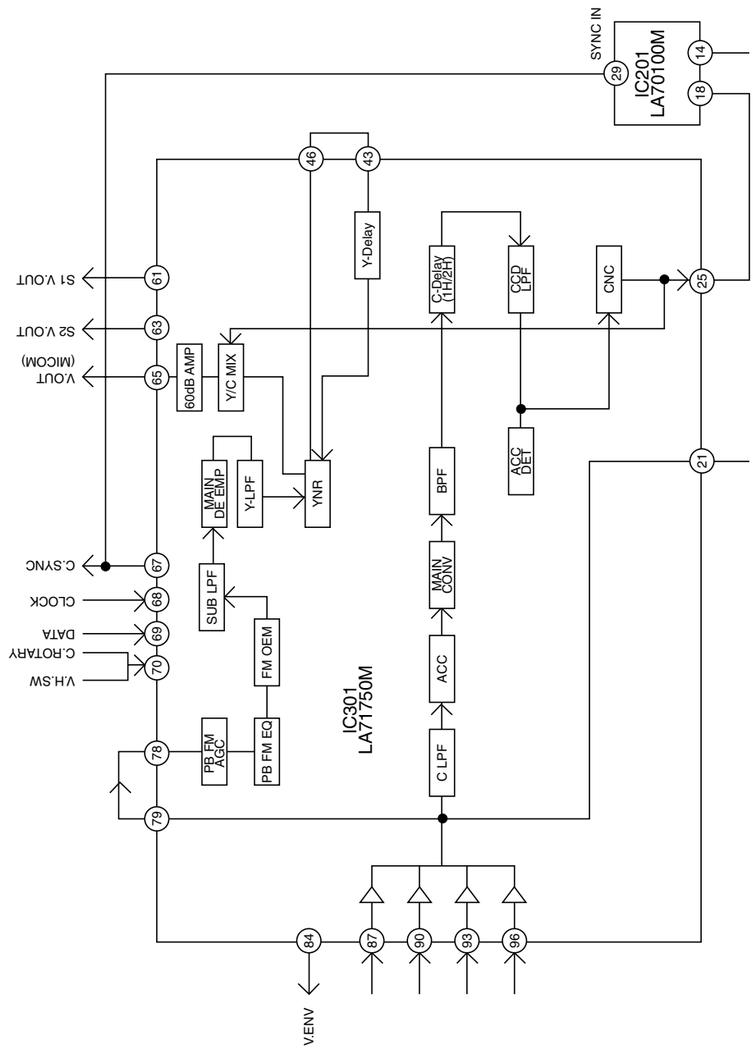


VPS BLOCK

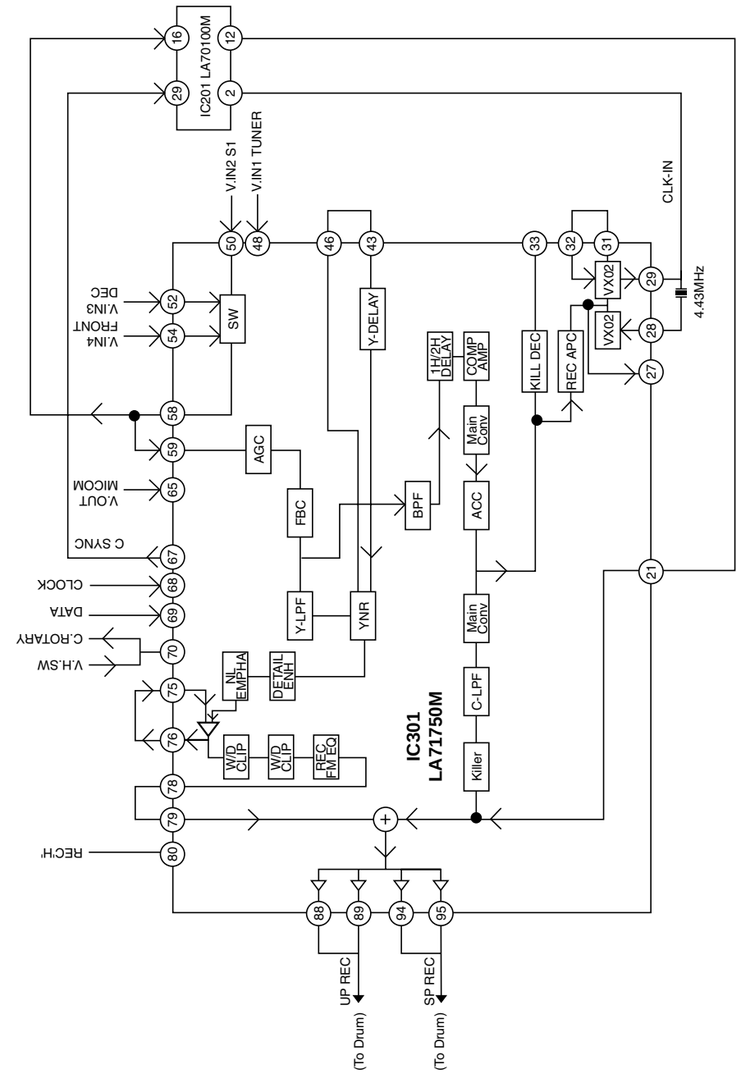
COMBI SCART
TOSHIBA

4. Y/C BLOCK DIAGRAM

(PB MODE)

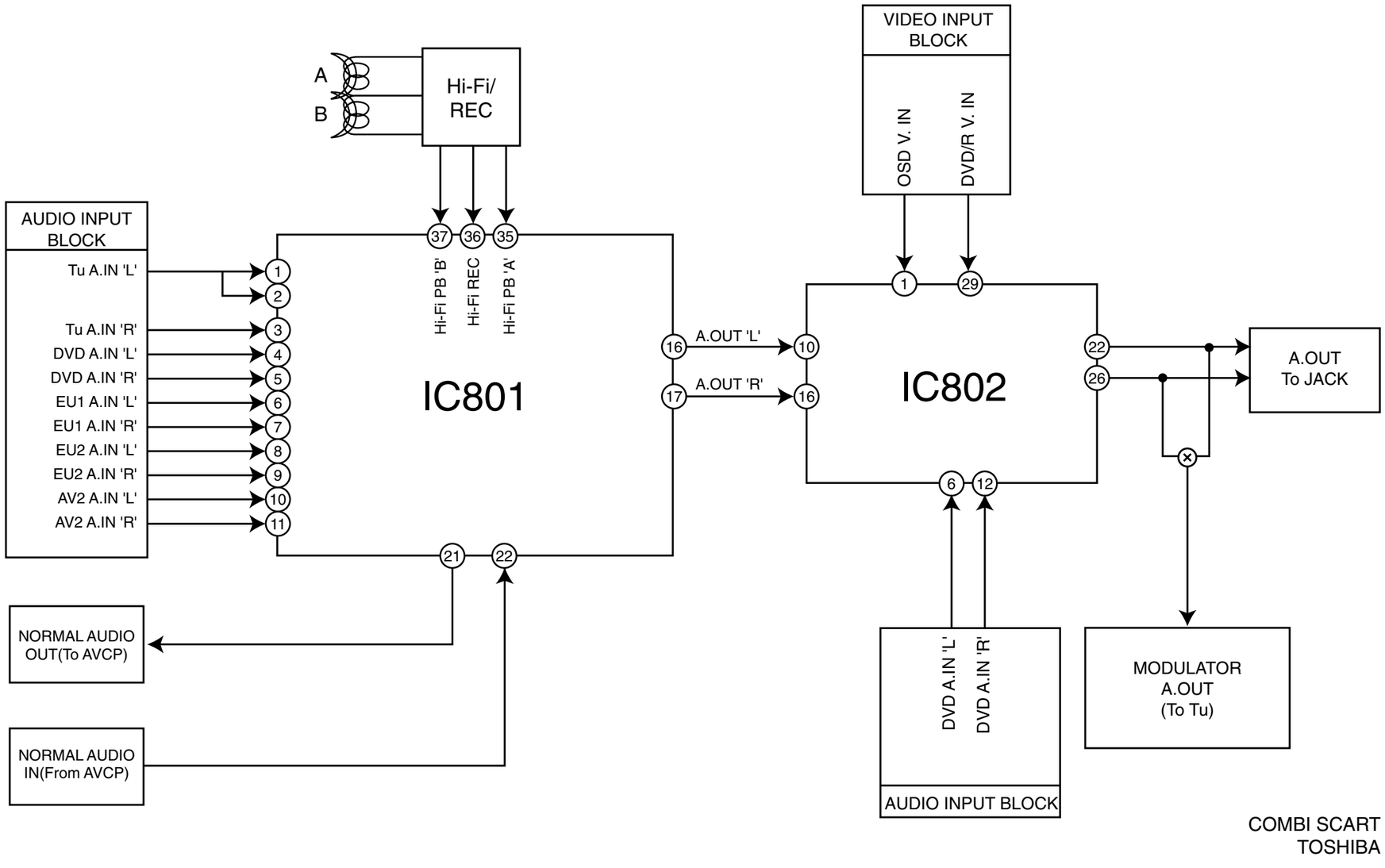


(REC MODE)

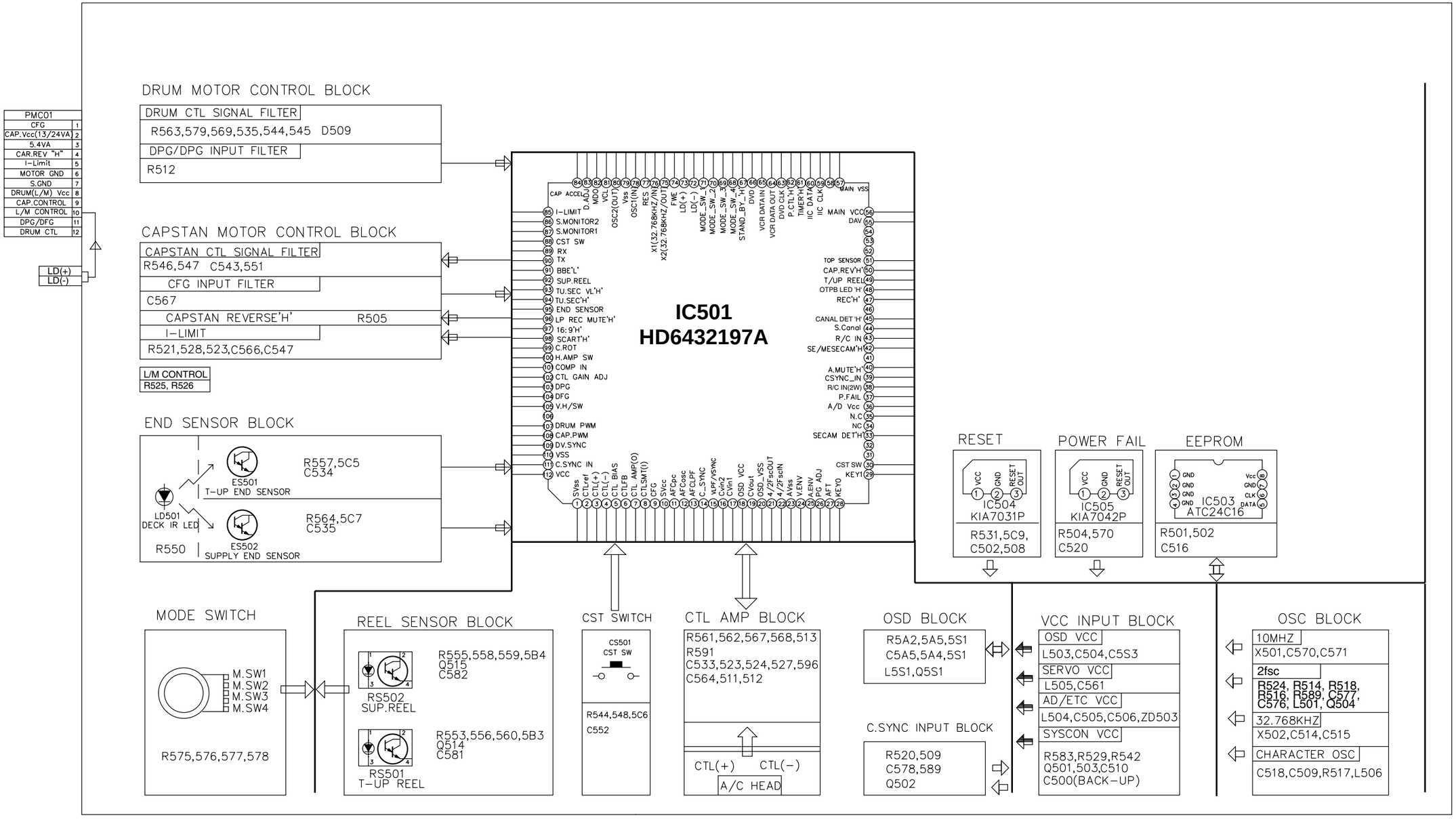


COMBI SCART
TOSHIBA

5. Hi-Fi BLOCK DIAGRAM



6. SYSTEM BLOCK DIAGRAM



COMBI SCART
TOSHIBA

CIRCUIT DIAGRAMS

1. POWER(SMPS) CIRCUIT DIAGRAM

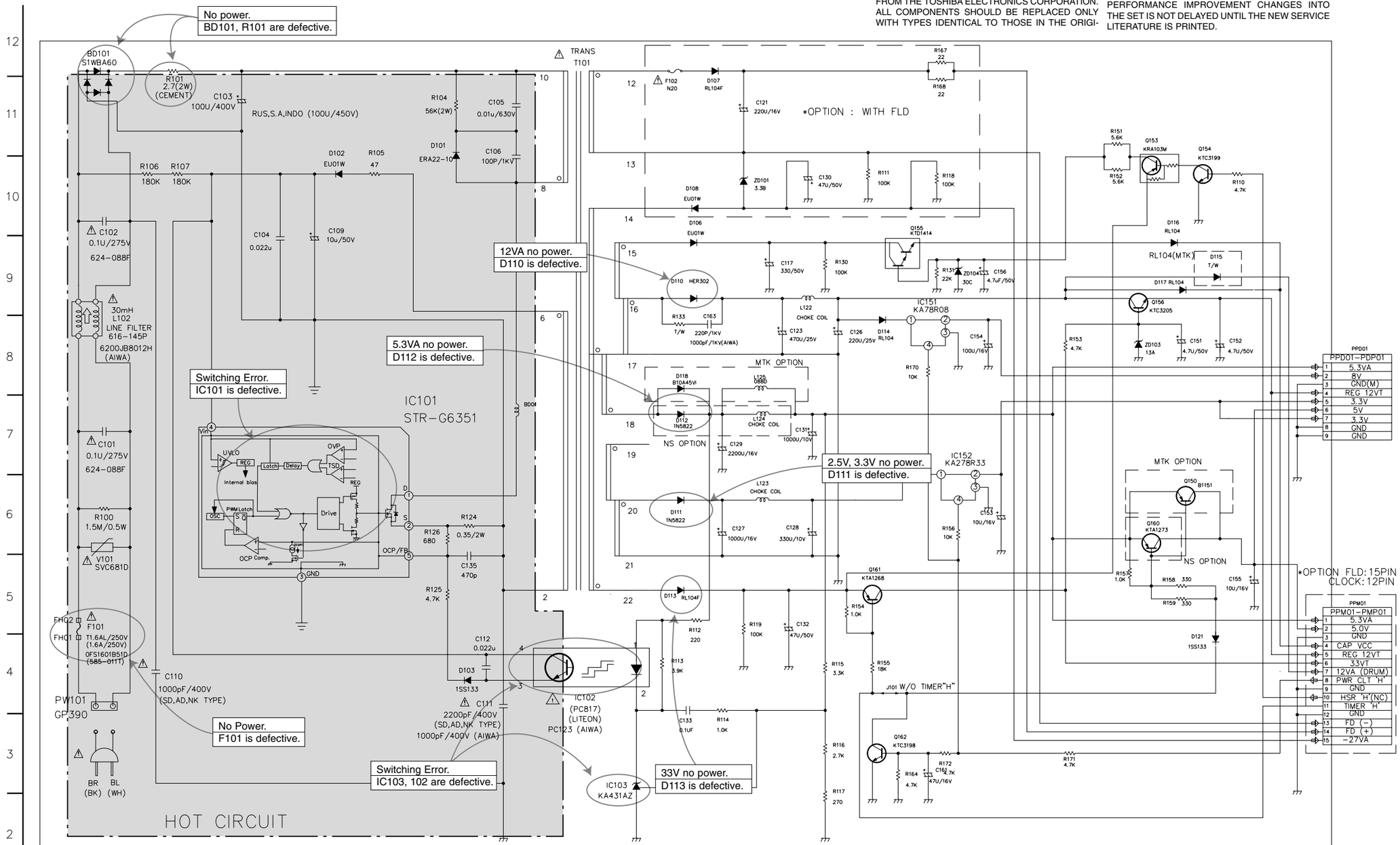
IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE TOSHIBA ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION.

THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

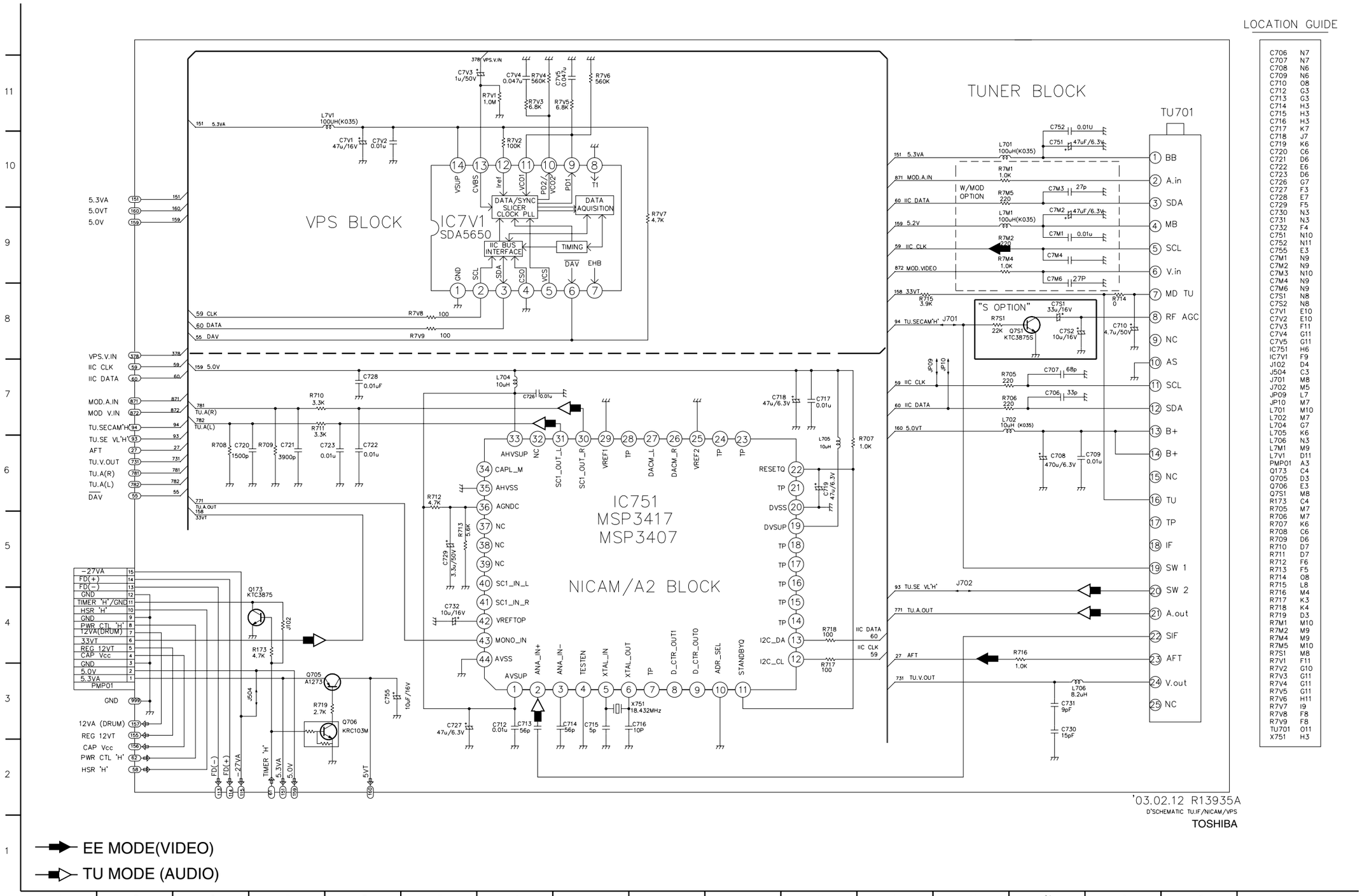
1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.



NOTES) ⏚ Symbol denotes AC ground.
⏚ Symbol denotes DC chassis ground.

NOTE) ⚠ Warning
Parts that are shaded are critical With respect to risk of fire or electricial shock.

2. TU/IF, NICAM & A2 CIRCUIT DIAGRAM

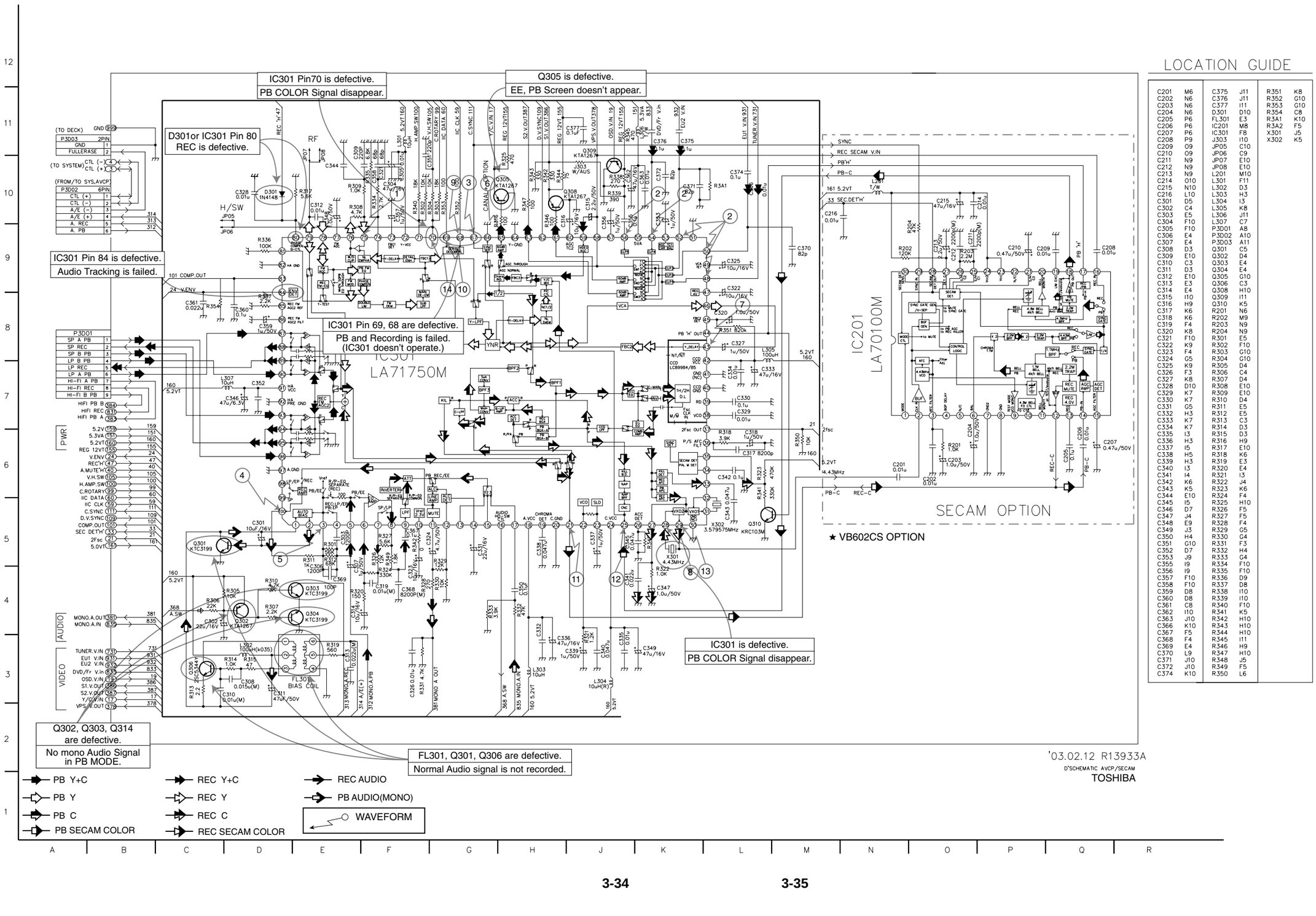


LOCATION GUIDE

C706	N7
C707	N7
C708	N6
C709	N6
C710	O8
C712	G3
C713	G3
C714	H3
C715	H3
C716	H3
C717	K7
C718	J7
C719	K6
C720	C6
C721	D6
C722	E6
C723	D6
C726	G7
C727	F3
C728	E7
C729	F5
C730	N3
C731	N3
C732	F4
C751	N10
C752	N11
C755	E3
C7M1	N9
C7M2	N9
C7M3	N10
C7M4	N9
C7M6	N9
C7S1	N8
C7S2	N8
C7V1	E10
C7V2	E10
C7V3	F11
C7V4	G11
C7V5	G11
IC751	H6
IC7V1	F9
J102	D4
J504	C3
J701	M8
J702	M5
JP09	L7
JP10	M7
L701	M10
L702	M7
L704	G7
L705	K6
L706	N3
L7M1	M9
L7V1	D11
PMP01	A3
Q173	C4
Q705	D3
Q706	E3
Q7S1	M8
R173	C4
R705	M7
R706	M7
R707	K6
R708	C6
R709	D6
R710	D7
R711	D7
R712	F6
R713	F5
R714	O8
R715	L8
R716	M4
R717	K3
R718	K4
R719	D3
R7M1	M10
R7M2	M9
R7M4	M9
R7M5	M10
R7S1	M8
R7V1	F11
R7V2	G10
R7V3	G11
R7V4	G11
R7V5	G11
R7V6	H11
R7V7	I9
R7V8	F8
R7V9	F8
TU701	O11
X751	H3

'03.02.12 R13935A
D'SCHEMATIC TU.IF/NICAM/VPS
TOSHIBA

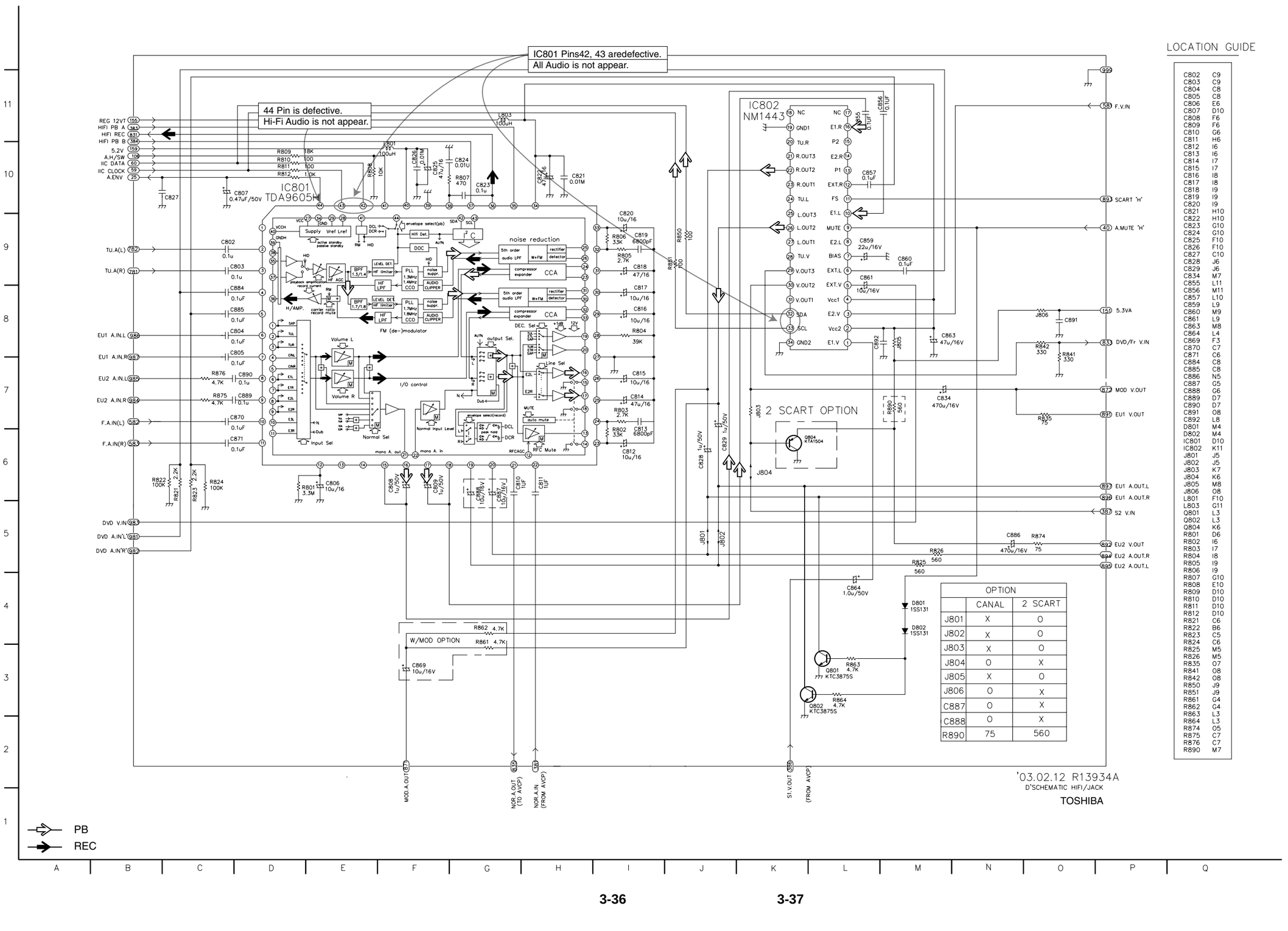
3. A/V CIRCUIT DIAGRAM



LOCATION GUIDE

C201	M6	C375	J11	R351	K8
C202	N6	C376	J11	R352	G10
C203	N6	C377	I11	R353	G10
C204	N6	D301	D10	R354	C8
C205	P6	FL301	E3	R3A1	K10
C206	P6	IC201	M8	R3A2	F5
C207	P6	IC301	F8	X301	J5
C208	P9	J303	I10	X302	K5
C209	O9	JP05	C10		
C210	O9	JP06	C9		
C211	N9	JP07	E10		
C212	N9	JP08	E10		
C213	N9	L201	M10		
C214	O10	L301	F11		
C215	N10	L302	D3		
C216	L10	L303	H3		
C301	D5	L304	I3		
C302	C4	L305	K8		
C303	E5	L306	J11		
C304	F10	L307	C7		
C305	F10	P3D01	A8		
C306	E4	P3D02	A10		
C307	E4	P3D03	A11		
C308	D3	Q301	C5		
C309	E10	Q302	D4		
C310	C3	Q303	E4		
C311	D3	Q304	E4		
C312	E10	Q305	G10		
C313	E3	Q306	C3		
C314	E4	Q308	H10		
C315	I10	Q309	I11		
C316	H9	Q310	K5		
C317	K6	R201	N6		
C318	K6	R202	M9		
C319	F4	R203	N9		
C320	K8	R204	N9		
C321	F10	R301	E5		
C322	K9	R302	F10		
C323	F4	R303	G10		
C324	G5	R304	G10		
C325	K9	R305	D4		
C326	F3	R306	C4		
C327	K8	R307	D4		
C328	D10	R308	E10		
C329	K7	R309	E10		
C330	K7	R310	D4		
C331	G5	R311	E5		
C332	H3	R312	E5		
C333	K7	R313	C3		
C334	K7	R314	D3		
C335	I3	R315	D3		
C336	H3	R316	H9		
C337	I5	R317	E10		
C338	H5	R318	K6		
C339	H3	R319	E3		
C340	I3	R320	E4		
C341	I4	R321	I3		
C342	K6	R322	J4		
C343	K5	R323	K6		
C344	E10	R324	F4		
C345	I5	R325	H10		
C346	D7	R326	F5		
C347	J4	R327	F5		
C348	E9	R328	F4		
C349	J3	R329	G5		
C350	H4	R330	G4		
C351	G10	R331	F3		
C352	D7	R332	H4		
C353	J9	R333	G4		
C355	I9	R334	F10		
C356	I9	R335	F10		
C357	F10	R336	D9		
C358	F10	R337	D8		
C359	D8	R338	I10		
C360	D8	R339	I10		
C361	C8	R340	F10		
C362	I10	R341	K5		
C363	J10	R342	H10		
C366	K10	R343	H10		
C367	F5	R344	H10		
C368	F4	R345	I11		
C369	E4	R346	H9		
C370	L9	R347	H10		
C371	J10	R348	J5		
C372	J10	R349	F5		
C374	K10	R350	L6		

4. Hi-Fi CIRCUIT DIAGRAM



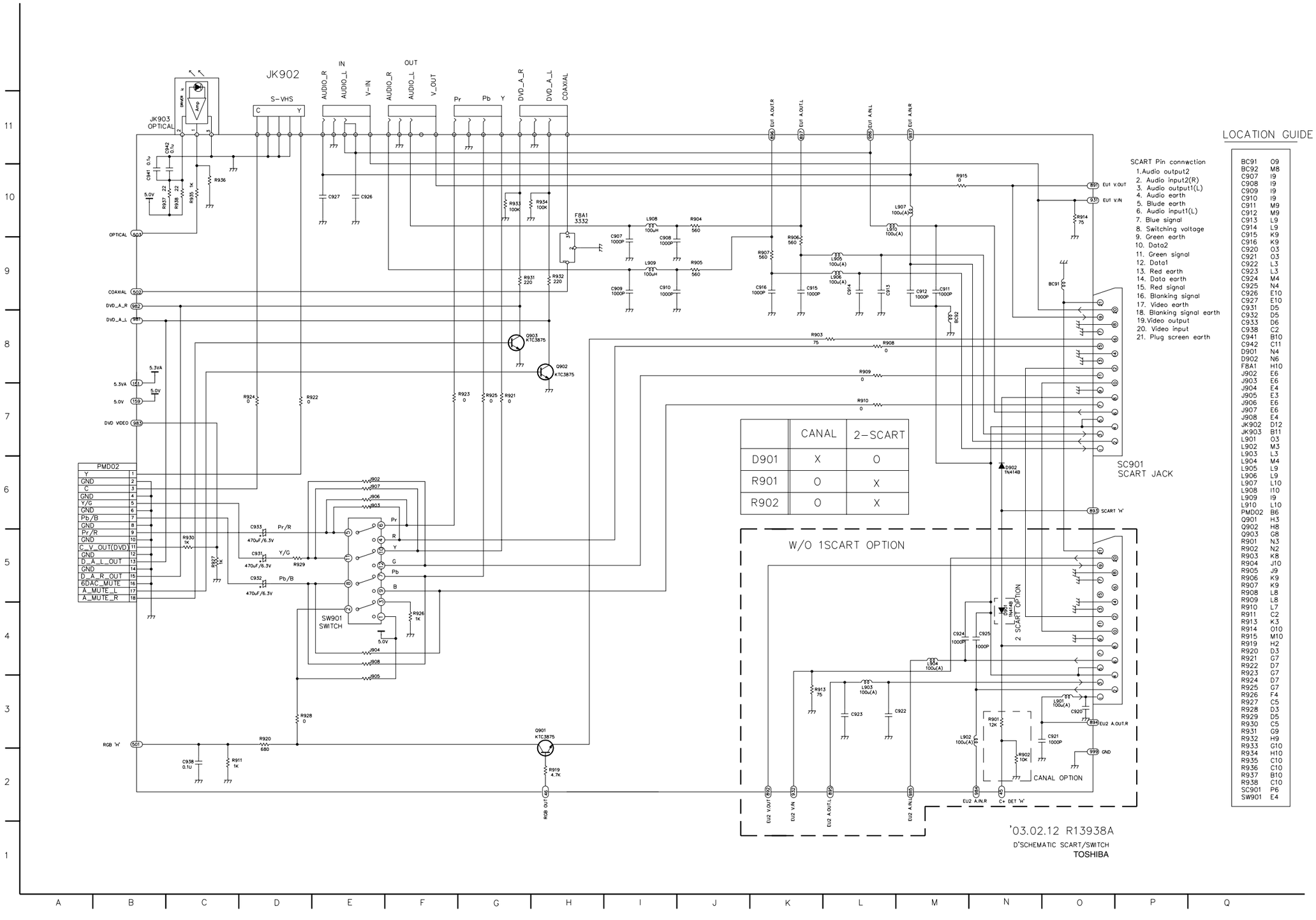
OPTION		
	CANAL	2 SCART
J801	X	O
J802	X	O
J803	X	O
J804	O	X
J805	X	O
J806	O	X
C887	O	X
C888	O	X
R890	75	560

LOCATION GUIDE

C802	C9
C803	C9
C804	C8
C805	C8
C806	E6
C807	D10
C808	F6
C809	F6
C810	G6
C811	H6
C812	I6
C813	I6
C814	I7
C815	I7
C816	I8
C817	I8
C818	I9
C819	I9
C820	I9
C821	H10
C822	H10
C823	G10
C824	G10
C825	F10
C826	F10
C827	C10
C828	J6
C829	J6
C834	M7
C855	L11
C856	M11
C857	L10
C859	L9
C860	M9
C861	L9
C863	M8
C864	L4
C869	F3
C870	C7
C871	C6
C884	C8
C885	C8
C886	N5
C887	G5
C888	G6
C889	D7
C890	D7
C891	O8
C892	L8
D801	M4
D802	M4
IC801	D10
IC802	K11
J801	J5
J802	J5
J803	K7
J804	K6
J805	M8
J806	O8
L801	F10
L803	G11
Q801	L3
Q802	L3
Q804	K6
R801	D6
R802	I6
R803	I7
R804	I8
R805	I9
R806	I9
R807	G10
R808	E10
R809	D10
R810	D10
R811	D10
R812	D10
R821	C6
R822	B6
R823	C5
R824	C6
R825	M5
R826	M5
R835	O7
R841	O8
R842	O8
R850	J9
R851	J9
R861	G4
R862	G4
R863	L3
R864	L3
R874	O5
R875	C7
R876	C7
R890	M7

'03.02.12 R13934A
D'SCHEMATIC HIFI/JACK
TOSHIBA

5. SCART(JACK) CIRCUIT DIAGRAM



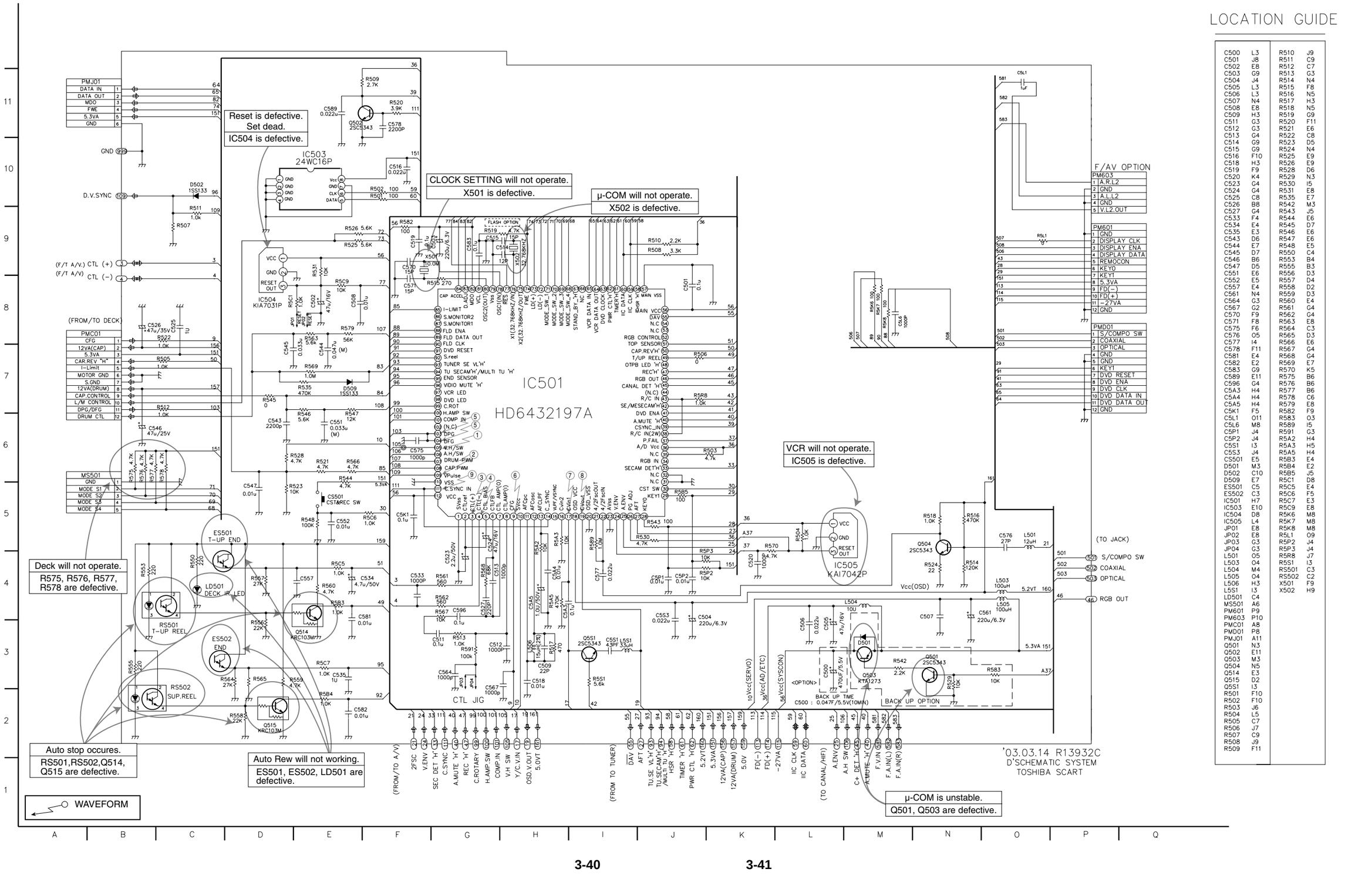
	CANAL	2-SCART
D901	X	O
R901	O	X
R902	O	X

LOCATION GUIDE

BC91	O9
BC92	M8
C907	I9
C908	I9
C909	I9
C910	I9
C911	M9
C912	M9
C913	L9
C914	L9
C915	K9
C916	K9
C920	O3
C921	O3
C922	L3
C923	L3
C924	M4
C925	N4
C926	E10
C927	E10
C931	D5
C932	D5
C933	D6
C938	C2
C941	B10
C942	C11
D901	N4
D902	N6
F8A1	H10
J902	E6
J903	E6
J904	E4
J905	E3
J906	E6
J907	E6
J908	E4
JK902	D12
JK903	B11
L901	O3
L902	M3
L903	L3
L904	M4
L905	L9
L906	L9
L907	L10
L908	I10
L909	I9
L910	L10
PMD02	B6
Q901	H3
Q902	H8
Q903	G8
R901	N3
R902	N2
R903	K8
R904	J10
R905	J9
R906	K9
R907	K9
R908	L8
R909	L8
R910	L7
R911	C2
R913	K3
R914	O10
R915	M10
R919	H2
R920	D3
R921	G7
R922	D7
R923	G7
R924	D7
R925	G7
R926	F4
R927	C5
R928	D3
R929	D5
R930	C5
R931	G9
R932	H9
R933	G10
R934	H10
R935	C10
R936	C10
R937	B10
R938	C10
SC901	P6
SW901	E4

'03.02.12 R13938A
D'SCHEMATIC SCART/SWITCH
TOSHIBA

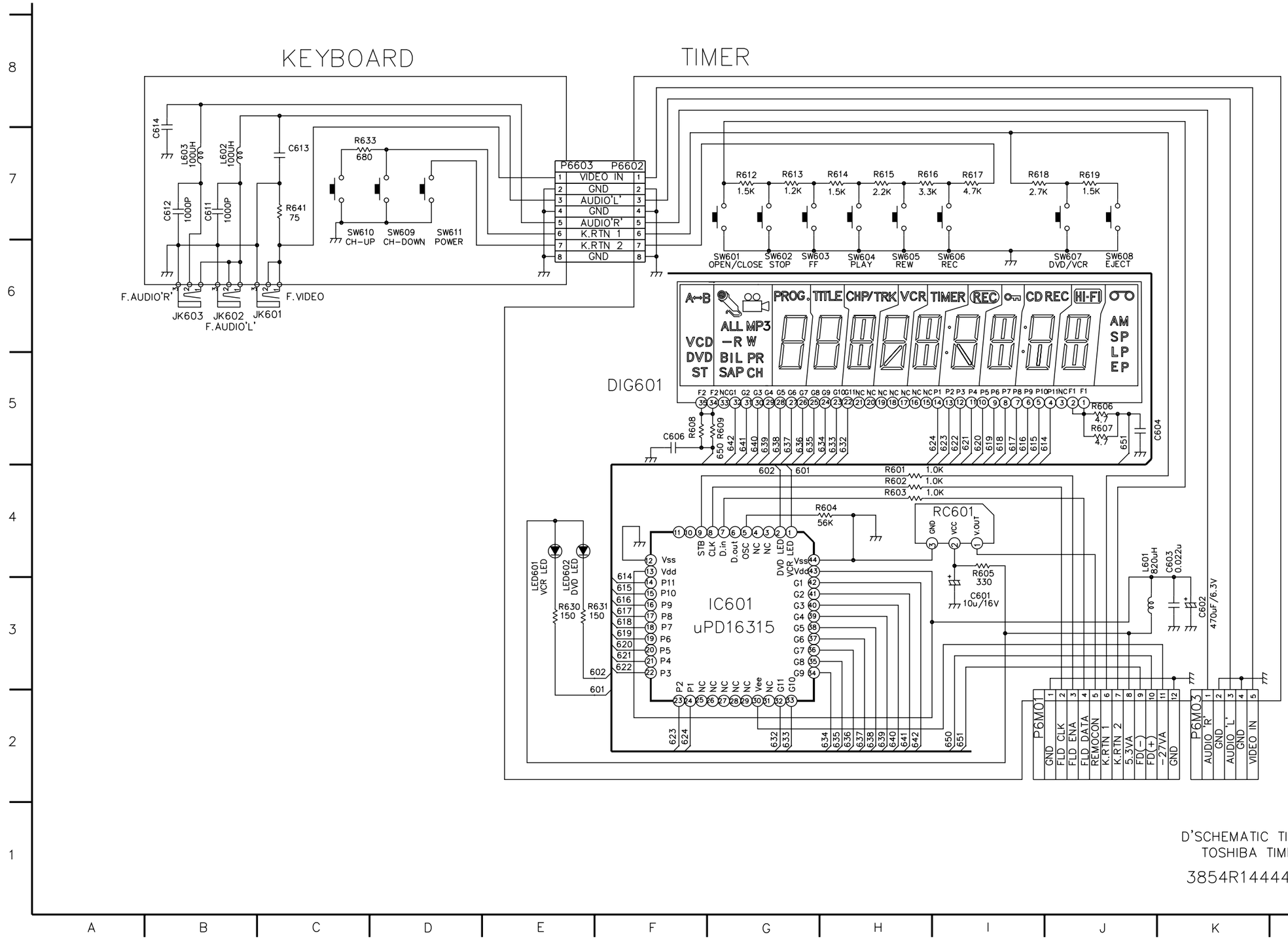
6. SYSTEM CIRCUIT DIAGRAM



LOCATION GUIDE

C500	L3	R510	J9
C501	J8	R511	C9
C502	E8	R512	C7
C503	G9	R513	G3
C504	J4	R514	N4
C505	L3	R515	F8
C506	L3	R516	N5
C507	N4	R517	H3
C508	E8	R518	N5
C509	H3	R519	G9
C511	G3	R520	F11
C512	G3	R521	E6
C513	G4	R522	C8
C514	G9	R523	D5
C515	G9	R524	N4
C516	F10	R525	E9
C518	H3	R526	E9
C519	F9	R528	D6
C520	K4	R529	N3
C523	G4	R530	I5
C524	G4	R531	E8
C525	C8	R535	E7
C526	B8	R542	M3
C527	G4	R543	J5
C533	F4	R544	E6
C534	E4	R545	D7
C535	E3	R546	E6
C543	D6	R547	E6
C544	E7	R548	E5
C545	D7	R550	C4
C546	B6	R553	B4
C547	D5	R555	B3
C551	E6	R556	D3
C552	E5	R557	D4
C557	E4	R558	D2
C561	N4	R559	D3
C564	G3	R560	E4
C567	G2	R561	G4
C570	F9	R562	G4
C571	F8	R563	E8
C575	F6	R564	C3
C576	O5	R565	D3
C577	I4	R566	E6
C578	F11	R567	G4
C581	E4	R568	G4
C582	E2	R569	E7
C583	G9	R570	K5
C589	E11	R575	B6
C596	G4	R576	B6
C5A3	H4	R577	B6
C5A4	H4	R578	C6
C5A5	H4	R579	E8
C5K1	F5	R582	F9
C5L1	O11	R583	O3
C5L6	M8	R589	I5
C5P1	J4	R591	G3
C5P2	J4	R5A2	H4
C5S1	I3	R5A3	H5
C5S3	J4	R5A5	H4
CS501	E5	R5B3	E4
D501	M3	R5B4	E2
D502	C10	R5B5	J5
D509	E7	R5C1	D8
ES501	C5	R5C5	E4
ES502	C3	R5C6	F5
IC501	H7	R5C7	E3
IC503	E10	R5C9	E8
IC504	D8	R5K7	M8
IC505	L4	R5K8	M8
JP01	E8	R5L1	O9
JP02	E8	R5P2	J4
JP03	G3	R5P3	J4
JP04	G3	R5R8	J7
L501	O5	R5S1	I3
L503	O4	RS501	C3
L504	M4	RS502	C2
L505	O4	X501	F9
L506	H3	X502	H9
L5S1	I3		
LD501	C4		
MS501	A6		
PM601	P9		
PM603	P10		
PMC01	A8		
PMD01	P8		
PMJ01	A11		
Q501	N3		
Q502	E11		
Q503	M3		
Q504	N5		
Q514	E3		
Q515	D2		
Q5S1	I3		
R501	F10		
R502	F10		
R503	J6		
R504	L5		
R505	C7		
R506	J7		
R507	C9		
R508	J9		
R509	F11		

7. TIMER CIRCUIT DIAGRAM



LOCATION GUIDE

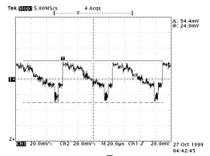
C601	I3
C602	K3
C603	K4
C604	K5
C606	F5
C611	B7
C612	B7
C613	C7
C614	B7
DIG601	F5
IC601	G3
JK601	B6
JK602	B6
JK603	B6
L601	J4
L602	B7
L603	B7
LED601	E3
LED602	E3
P6602	F7
P6603	E7
P6M01	I2
P6M03	K2
R601	H4
R602	H4
R603	H4
R604	G4
R605	I4
R606	J5
R607	J5
R608	F5
R609	G5
R612	G7
R613	G7
R614	H7
R615	H7
R616	H7
R617	I7
R618	I7
R619	J7
R630	E3
R631	E3
R633	C7
R641	C7
RC601	I4
SW601	G6
SW602	G6
SW603	G6
SW604	H6
SW605	H6
SW606	I6
SW607	J6
SW608	J6
SW609	D7
SW610	C7
SW611	D7

D'SCHEMATIC TIMER
TOSHIBA TIMER

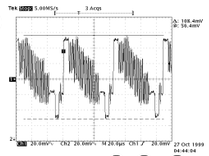
3854R14444A

WAVEFORMS

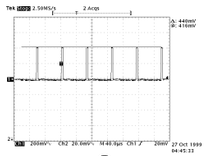
★ IC301 Waveform

① 

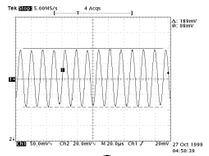
IC301 Pin ㉕
PB mode
500mvp-p

② 

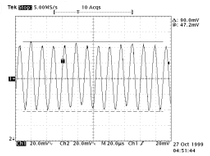
IC301 Pins ㊽ ,㊿ , ㊿
㊿ , ㊿
Video in 1Vp-p

③ 

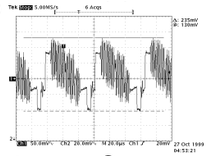
IC301 Pin ㊼
PB/REC mode
4.0Vp-p

④ 

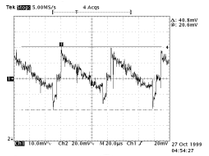
IC301 Pin ㊿
REC mode
1.1Vp-p

⑤ 

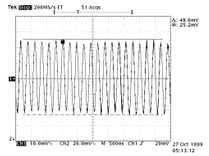
IC301 Pin ③
REC mode
2.0Vp-p

⑥ 

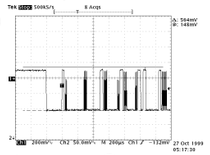
IC301 Pin ㊺
PB mode
2.02Vp-p

⑦ 

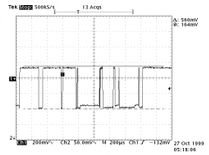
IC301 Pin ㊸
PB mode
400mVp-p

⑧ 

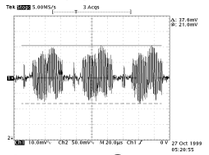
IC301 Pin ㉘
PB mode
400mVp-p

⑨ 

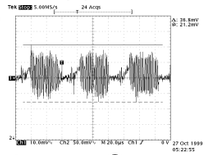
IC301 Pin ㊽
PB/REC mode
5Vp-p

⑩ 

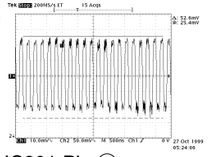
IC301 Pin ㊾
PB/REC mode
5Vp-p

⑪ 

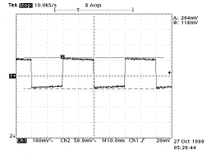
IC301 Pins ㉑
REC mode
340mVp-p

⑫ 

IC301 Pins ㉕
PB mode
300mVp-p

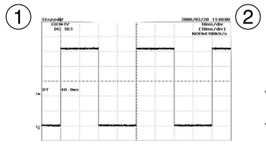
⑬ 

IC301 Pin ㉙
PB mode
400mVp-p

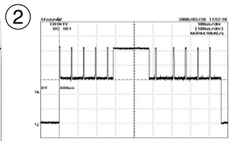
⑭ 

IC301 Pin ㊿
PB mode
3.6Vp-p

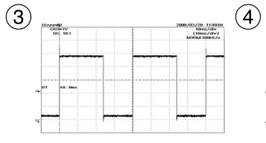
★ IC501 Waveform

① 

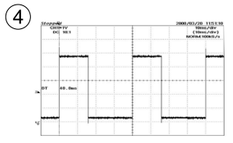
V.HSW
(IC501 Pin 105)
1V/10mS
REC/PB MODE

② 

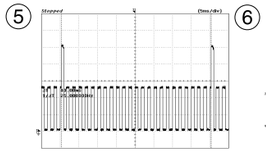
DV.SYNC
(IC501 PIN 109)
1V/100uS
QUE/REV MODE

③ 

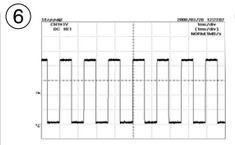
CTL(+)
(IC501 Pin 3)
1V/10mS

④ 

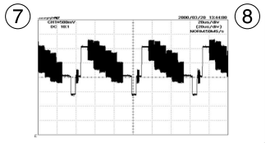
CTL(-)
(IC501 Pin4)
1V/10mS

⑤ 

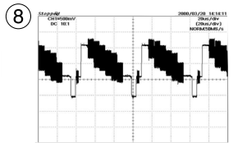
DPG/DFG
(IC501 PIN 103,104)
1V/10mS
REC/PB MODE

⑥ 

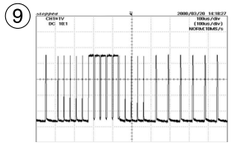
CFG
(IC501 Pin9)
1V/10mS

⑦ 

V.IN
(IC501 Pin 17)
500mV/20uS

⑧ 

V.OUT
(IC501 Pin 19)
500mV/20uS
EE/PB MODE

⑨ 

C.SYNC
(IC501 Pin 111)
1.0V/100uS
EE/PB MODE

• CIRCUIT VOLTAGE CHART

MODE / PIN NO.	EE	PB	REC
IC201			
1	2.36 V	2.35 V	2.32 V
2	2.4 V	2.35 V	2.4 V
3	3.5 V	3.49 V	3.5 V
4	2.43 V	2.41 V	2.38 V
5	0.002 V	0.005 V	0.006 V
6	0.4 V	3.7 V	0.39 V
7	0.003 V	0.003 V	0.003 V
8	0.003 V	0.003 V	0.003 V
9	2.87 V	2.85 V	2.81 V
10	2.36 V	2.35V	2.32 V
11	3.16 V	3.13 V	3 V
12	3 V	1.7 V	3.03 V
13	4 V	4 V	4 V
14	2.3 V	2.3 V	2.25 V
15	2.98 V	1.78 V	2.93 V
16	3.2 V	3.2 V	3.2 V
17	0.15 V	3.86 V	0.017 V
18	0.124 V	3.38 V	0.127 V
19	2.23 V	2.23 V	2.23 V
20	3 V	3.3 V	3.3 V
21	1.84 V	2.34 V	2.35 V
22	4.71 V	0.002 V	0.007 V
23	4.72 V	4.69 V	4.64 V
24	4.72 V	4.69 V	4.63 V
25	2.37 V	2.26 V	2.37 V
26	2.37 V	2.25 V	2.36 V
27	3 V	2.86 V	3 V
28	0.182 V	0.187 V	0.182 V
29	0.46 V	0.62 V	0.85 V
30	1.95 V	1.94 V	1.91 V
IC301			
1	4.8 V	4.84 V	0.99 V
2	0.11 V	0.014 V	0.81 V
3	2.16 V	2.16 V	2.03 V
4	0.69 V	0.63 V	1.73 V
5	2.15 V	2.15 V	2.26 V
6	2.16 V	2.15 V	2.06 V
7	2.15 V	2.15 V	2.1 V
8	2.15 V	2.15 V	2.1 V
9	2.14 V	2.14 V	2.73 V
10	2.16 V	2.16 V	2.66 V
11	2.23 V	2.27 V	2.8 V
12	1.56 V	0.002 V	2.0 V
13	2.14 V	2.14 V	0.095 V
14	0.022 V	0.022 V	2.05 V
15	2.14 V	2.14 V	2.08 V
16	4.85 V	0.146 V	4.68 V
17	2.14 V	2.14 V	2.09 V
18	4.8 V	4.86 V	4.73 V
19	3.88 V	3.92 V	2.72 V
20	2.31 V	0.003 V	0.006 V
21	3 V	1.68 V	3.02 V
22	3.2 V	2.62 V	3.2 V
23	3.2 V	2.55 V	3.2 V

MODE / PIN NO.	EE	PB	REC
24	4.85 V	4.85 V	4.75 V
25	0.121 V	3.4 V	0.19 V
26	1.65 V	1.25 V	1.6 V
27	2.16 V	2.1 V	2.14 V
28	3.75 V	3.7 V	3.66 V
29	2.43 V	2.46 V	2.34 V
30	0.002 V	0.002 V	0.005 V
31	4.76 V	4.58 V	4.72 V
32	4.68 V	4.58 V	4.71 V
33	2.88 V	2.86 V	2.8 V
34	0.061 V	0.06 V	0.061 V
35	3.02 V	2.34 V	2.99 V
36	3.5 V	2.84 V	3.4 V
37	1.7 V	1.76V	1.61 V
38	2 V	2.05 V	1.94 V
39	8.65 V	8.6 V	8.38 V
40	0.002 V	0.003 V	0.006 V
41	0.002 V	0.003 V	0.006 V
42	4.8 V	4.8 V	4.68 V
43	2.4 V	2.67 V	2.17 V
44	13.8 mV	3.86 V	0.03 V
45	2.5 V	2.52 V	2.55 V
46	2.6 V	2.78 V	2.64 V
47	4.14 V	4.14 V	4.14 V
48	3.3 V	3.09 V	3.30 V
49	2.97 V	2.93 V	3.69 V
50	1.93 V	1.92 V	1.92 V
51	0.002 V	0.003 V	0.005 V
52	1.93 V	1.93 V	1.92 V
53	2.33 V	2.33 V	2.34 V
54	1.93 V	1.92 V	1.92 V
55	5.14 V	5.14 V	5.13 V
56	2.24 V	2.57 V	2.22 V
57	1.95 V	2.28 V	0.006 V
58	3 V	2.55 V	3.01 V
59	2.9 V	2.93 V	2.92 V
60	1.47 V	1.54 V	1.48 V
61	1.8 V	2.44 V	1.79 V
62	0.087 V	0.09 V	0.088 V
63	1.8 V	2.55 V	1.78 V
64	0.002 V	0.003 V	0.006 V
65	1.71 V	0.002 V	1.69 V
66	0.002 V	0.003 V	0.006 V
67	0.005 V	0.07 V	0.44 V
68	4.8 V	4.8 V	4.78 V
69	4.7 V	4.7 V	4.7 V
70	7.75 V	2.55 V	5.55 V
71	5.55 V	0.008 V	0.008 V
72	4.84 V	4.8 V	4.72 V
73	2.21 V	2.2 V	2.24 V
74	2.45 V	2.6 V	2.43 V
75	2.38 V	0.72 V	2.38 V
76	2.4 V	0.81 V	2.39 V
77	1.58 V	1.6 V	1.48 V
78	2.44 V	3.35 V	2.33 V

MODE / PIN NO.	EE	PB	REC
79	1.73 V	1.67 V	2.51 V
80	0.98 V	0.98 V	4.46 V
81	1.1 V	1.13 V	1.15 V
82	0.003 V	0.004 V	0.006 V
83	1.65 V	1.03 V	1.41 V
84	0.258 V	2.5 V	0.014 V
85	0.002 V	0.003 V	1.38 V
86	0.251 V	0.014 V	1.98 V
87	0.77 V	0.78 V	0.78 V
88	0.77 V	0.78 V	0.77 V
89	0.77 V	0.78 V	0.77 V
90	0.77 V	0.78 V	0.77 V
91	4.85 V	4.83 V	4.74 V
92	2.1 mV	0.004 V	0.006 V
93	1.7 V	1.72 V	3.94 V
94	1.7 V	1.71 V	3.93 V
95	1.7 V	1.71 V	3.92 V
96	1.7 V	1.71 V	3.94 V
97	0.002 V	0.005 V	0.006 V
98	2.16 V	2.16 V	2.21 V
99	2.16V	2.16 V	2.25 V
100	2.16 V	2.16 V	2.31 V
IC5F1			
1	2.33 V	2.31 V	2.3 V
2	4.98 V	4.9 V	4.9 V
3	5 V	5 V	5 V
4	4.96 V	4.9 V	4.9 V
5	4.89 V	4.85 V	4.8 V
6	0.64 V	0.59 V	0.6 V
7	0.64 V	0.59 V	0.6 V
8	0.64 V	0.61 V	0.6 V
9	0.73 V	0.93 V	0.96 V
10	1 V	0.92 V	0.91 V
11	0.72 V	0.63 V	0.92 V
12	1.83 V	1.84 V	1.8 V
13	0.73 V	0.75 V	0.72 V
14	1.26 V	1.22 V	1.2 V
15	1.26 V	1.23 V	1.1 V
16	1.65 V	1.63 V	1.54 V
17	1.58 V	1.58 V	1.42 V
18	4.89 V	4.8 V	4.8 V
19	0.002 V	0.003 V	0.003 V
20	1.75 V	1.63 V	1.5 V
21	1.7 V	1.7 V	1.5 V
22	1.78 V	1.71 V	1.5 V
23	1.73 V	1.6 V	1.41 V
24	0.002 V	0.003 V	0.003 V
IC751			
1	5.1 V	5.1 V	5.08 V
2	1.5 V	1.5 V	1.51 V
3	1.5 V	1.5 V	1.5 V
4	0.002 V	0.003 V	0.003 V
5	2.5 V	2.46 V	2.46 V
6	2.44 V	2. 44 V	2.43 V
7	1.84 V	1.89 V	2.06 V

MODE / PIN NO.	EE	PB	REC
8	1.86 V	0.004 V	0.004 V
9	1.86 V	0.004 V	0.004 V
10	0.002 V	0.003 V	0.003 V
11	5.12 V	5.12 V	5.11 V
12	4.8 V	4.8 V	4.8 V
13	4.7 V	4.75 V	4.7 V
14	1.75V	2.6 V	2.59 V
15	1.77 V	2.6 V	2.6 V
16	1.77 V	5 V	5 V
17	1.75 V	1.5 V	2.06 V
18	1.75 V	1.5 V	2 V
19	5 V	5 V	5 V
20	0.003 V	0.003 V	0.003 V
21	1.88 V	1.58 V	2 V
22	5.1 V	5.1 V	5.11 V
23	0.002 V	0.005 V	0.004 V
24	0.002 V	0.005 V	0.005 V
25	0.002 V	0.003 V	0.003 V
26	0.05 V	0.051 V	0.051 V
27	0.05 V	0.05 V	0.05 V
28	0.002 V	0.003 V	0.005 V
29	0.002 V	0.003 V	0.003 V
30	2.78 V	2.77 V	2.76 V
31	2.78 V	1.9 V	2.76 V
32	0.002 V	0.003 V	0.005 V
33	5.1 V	5.09 V	5.08 V
34	4.06 V	4.08 V	4.06 V
35	0.003 V	0.003 V	0.003 V
36	2.77 V	2.76 V	2.76 V
37	0.002 V	0.002 V	0.002 V
38	0.002 V	0.003 V	0.002 V
39	0.002 V	0.003 V	0.002 V
40	2.76 V	2.75 V	2.75 V
41	2.76 V	2.75 V	2.75 V
42	2.59 V	2.59 V	2.6 V
43	2.35 V	2.35 V	2.35 V
44	0.003 V	0.003 V	0.003 V
IC501			
1	0.002 V	0.002 V	0.002 V
2	2.56 V	2.55 V	2.55 V
3	2.56 V	2.55 V	2.9 V
4	2.56 V	2.55 V	2 V
5	2.56 V	2.55 V	2.55 V
6	2.56 V	2.56 V	2.55 V
7	2.64 V	2.63 V	2.6 V
8	2.54 V	2.53 V	2.52 V
9	0.064 V	2.27 V	2.26 V
10	5.13 V	5.12 V	5.11 V
11	1.69 V	1.68 V	1.66 V
12	1.7 V	1.7 V	1.67 V
13	2.32 V	2 V	2.3 V
14	0.48 V	0.08 V	0.53 V
15	1.28 V	1.29 V	1.36 V
16	1.84 V	1.83 V	1,8 V
17	2.32 V	3 V	2.26 V

MODE / PIN NO.	EE	PB	REC
18	4.7 V	4,7 V	4.6 V
19	2.19 V	3 V	2.13 V
20	0.01 V	0.009 V	0.01 V
21	2.2 V	2.2 V	2.16 V
22	2.32 V	2.3 V	2.26 V
23	0.01 V	0.009 V	0.01 V
24	0.3 V	2.84 V	0.012 V
25	0.08 V	3.4 V	0.068 V
26	5.14 V	5.13 V	5.12 V
27	4.2 V	4.16 v	3.93 V
28	5.13 V	5.13 V	5.11 V
29	5.13 V	5.13 V	5.11 V
30	0.004 V	0.002 V	0.003 V
31	0.002 V	0.002 V	0.002 V
32	0.002 V	0.002 V	0.002 V
33	0.18 V	0.18 V	0.18 V
34	1.37 V	1.3 V	1.42 V
35	5.14 V	5.13 V	5.1 V
36	5.14 V	5.13 V	5.1 V
37	4.74 V	4.73 V	4.7 V
38	4.74 V	4.75 V	4.7 V
39	2.45 V	4.9 V	2.33V
40	5 V	0.003 V	4.96 V
41	2.28 V	1.55 V	1.42 V
42	0.003 V	0.003 V	0.004 V
43	4.76 V	4.75 V	4.73 V
44	0.003 V	0.003 V	0.004 V
45	(-)0.001 V	(-)0.001 V	(-)0.001 V
46	0.003 V	0.003 V	0.004 V
47	0.003 V	0.003 V	5 V
48	0.003 V	0.003 V	0.004 V
49	5.14 V	0~5 V	0.005~5 V
50	5.1 V	0.003 V	0.004 V
51	4.38 V	0.03 V	0.035 V
52	0.031 V	5.06 V	0.038 V
53	0.003 V	0.003 V	0.004 V
54	5.1 V	5 V	5 V
55	5.1 V	5.13 V	5.11 V
56	5.1 V	5,1 V	5.1 V
57	0.002 V	0.002 V	0.002 V
58	0.003 V	0.004 V	0.004 V
59	4.8 V	4.8 V	4.8 V
60	4.7 V	4.7 V	4.9 V
61	4.7 V	5 V	5 V
62	5 V	5 V	5 V
63	1.8 V	1.3 V	1.68 V
64	5.1 V	5 V	5 V
65	1.78 V	5.1 V	1.66 V
66	5.1 V	5.1 V	5.08 V
67	0.004 V	4.4 V	5.08 V
68	0.001 V	5.1 V	0.005 V
69	0.001 V	5.1 V	5.12 V
70	5.14 V	5.1 V	5.12 V
71	5.14 V	0.001 V	0.001 V
72	0.028 V	0.028 V	0.029 V

MODE / PIN NO.	EE	PB	REC
73	5 V	5.1 V	5.04 V
74	0.001 V	0.001 V	0.002 V
75	1.5 V	1.93 V	1.48 V
76	1.7 V	2.02 V	1.44 V
77	5.1 V	5.1 V	5.08 V
78	2.5 V	2.51 V	2.52 V
79	0.001 V	0.002 V	0.002 V
80	2.53 V	2.5 V	2.5 V
81	3.2 V	3.2 V	3.19 V
82	5.12 V	5.1 V	5.1 V
83	0.172 V	2.68 V	2.55 V
84	0.004 V	2.4 V	2.69 V
85	0.019 V	3.4 V	3.44 V
86	2.55 V	2.55 V	2.56 V
87	5.11 V	3.1 V	2.29 V
88	5.11 V	4.95 V	4.9 V
89	5.11 V	4.97 V	4.9 V
90	5.11 V	5 V	4.98 V
91	5.11 V	5.1 V	5.09 V
92	5.12 V	0.008~0.05 V	0.006 V
93	0.005 V	0.005 V	0.006 V
94	0.005 V	0.005 V	0.013 V
95	4.38 V	0.05 V	0.012 V
96	0.005 V	0.005 V	0.006 V
97	5.11 V	5.1 V	5.09 V
98	0.005 V	5.3 V	0.006 V
99	5.11 V	2.55 V	2.52 V
100	0.005 V	0.005 V	0.006 V
101	1.51 V	2.6 V	1.31 V
102	0.005 V	0.006 V	0.006 V
103	0.099 V	1.36 V	1.38 V
104	0.099 V	1.36 V	1.36 V
105	5.11 V	2.55 V	2.53 V
106	0.005 V	2.54 V	2.53 V
107	0.005 V	2.75 V	2.75 V
108	0.005 V	2.81 V	2.79 V
109	0.049 V	50.6 V	0.05 V
110	0.002 V	0.002 V	0.002 V
111	0.48 V	0.6 V	0.55 V
112	5.12 V	5.11 V	5.1 V
IC801			
1	3.8 V	3.81 V	3.82 V
2	3.8 V	3.82 V	3.82 V
3	3.8 V	3.82 V	3.82 V
4	3.8 V	3.82 V	3.82 V
5	3.8 V	3.82 V	3.82 V
6	3.8 V	3.82 V	3.82 V
7	3.8 V	3.82 V	3.82 V
8	3.8 V	3.82 V	3.82 V
9	3.8 V	3.82 V	3.82 V
10	3.8 V	3.82 V	3.82 V
11	3.8 V	3.82 V	3.82 V
12	0.054 V	~	0.048 V
13	3.87 V	3.8 V	3.99 V
14	0.008 V	0.003 V	0.011 V

MODE / PIN NO.	EE	PB	REC
15	0.008 V	0.006 V	0.01 V
16	6 V	6.07 V	6.07 V
17	6 V	6.07 V	6.08 V
18	7 V	6.07 V	0.11 V
19	6 V	6.06 V	0.028V
20	6 V	6.07 V	6.07 V
21	4.58 V	4.57 V	5.9 V
22	3.82 V	3.82 V	3.82 V
23	3.86 V	3.84 V	3.86 V
24	3.87 V	3.84 V	3.87 V
25	3.87 V	3.9 V	3.87 V
26	0.76 V	0.003 V	0.76 V
27	0.001 V	0.003 V	0.005 V
28	3.84 V	3.83 V	3.83 V
29	3.86 V	3.86 V	3.86 V
30	0.77 V	0.76V	0.76 V
31	3.87 V	3.87 V	3.86 V
32	3.86 V	3.87 V	3.87 V
33	3.86 V	3.86 V	3.86 V
34	11.84 V	11.76 V	11.77 V
35	0.64 V	0.44 V	4.3 V
36	0.64 V	0.62 V	4.3 V
37	0.64 V	0.63 V	4.28 V
38	0.005 V	0.008 V	4.32 V
39	0.002 V	0.005 V	0.006 V
40	5 V	5.07 V	5.05 V
41	0.005 V	0.92 V	0.92 V
42	4.7 V	4.7 V	4.7 V
43	4.8 V	4.8 V	4.8 V
44	0.078 V	3.3 V	0.068 V
IC802			
1	3 V	2.93 V	3.05 V
2	11.8 V	11.76 V	11.76 V
3	2.74 V	2.74 V	2.74 V
4	11.8 V	11.75 V	11.76 V
5	2.74 V	2.75 V	2.75 V
6	5.5V	5.5 V	5.5 V
7	5.6 V	5.56 V	5.57 V
8	5.5 V	5.5 V	5.49 V
9	5 V	0.006 V	4.97 V
10	5.5 V	5.5 V	5.5 V
11	11.23 V	11.15 V	11.16 V
12	5.5 V	5.5 V	5.5 V
13	0.008 V	0.01 V	0.009 V
14	5.54 V	5.5 V	5.5 V
15	0.008 V	0.009 V	0.009 V
16	5.5 V	5.5 V	5.51 V
17	0.002 V	0.003 V	0.005 V
18	0.002 V	0.005 V	0.004 V
19	(-)0.001 V	0.001 V	0.001 V
20	5.5 V	5.5 V	5.51 V
21	5.6 V	5.59 V	5.59 V
22	5.6 V	5.59 V	5.59 V
23	5.6 V	5.51 V	5.52 V
24	5.54 V	5.5 V	5.5 V

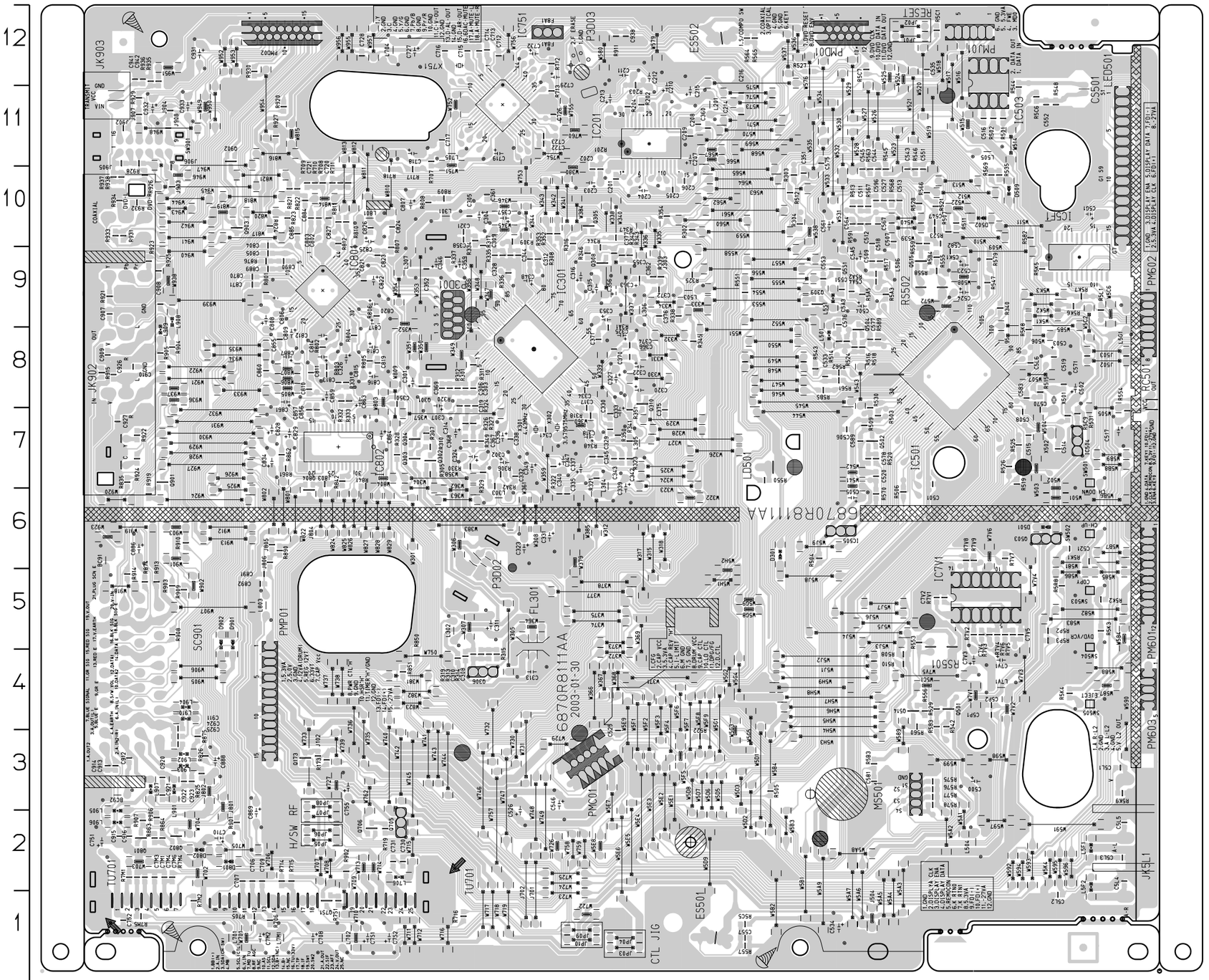
MODE / PIN NO.	EE	PB	REC
25	5.6 V	5.58 V	5.59 V
26	5.6 V	5.58 V	5.59 V
27	5.54 V	5.5 V	5.5 V
28	4.16 V	4.32 V	4.51 V
29	1.46 V	1.46 V	1.46 V
30	2.1 V	1.99 V	2.07 V
31	1.35 V	1.35 V	1.35 V
32	4.7 V	4.7 V	4.7 V
33	4.8 V	4.8 V	4.8 V
34	(-) 0.002 V	0.001 V	0.000 V

PIN	EE	PB	REC
Q301			
BASE	0.01 V	0.013 V	0.79 V
EMITER	0.003 V	0.004 V	0.005 V
COLECTOR	4.83 V	4.82 V	1.02 V
Q302			
BASE	4.85 V	4.18 V	4.75 V
EMITER	0.002 V	4.85 V	4.75 V
COLECTOR	(-)2.79 V	4.8 V	(-)25.5 V
Q303			
BASE	(-)2.76 V	0.7 V	(-)25.6 V
EMITER	(-)0.8 V	0.007 V	(-)19.13 V
COLECTOR	0.002 V	0.012 V	0.004 V
Q304			
BASE	(-)2.62 V	0.72 V	(-)25.4 V
EMITER	0.002 V	0.002 V	(-)19.4 V
COLECTOR	0.002 V	0.004 V	0.004 V
Q305			
BASE	1.71 V	1.41 V	1.7 V
EMITER	2.41 V	2.1 V	2.39 V
COLECTOR	0.003 V	0.004 V	0.005 V
Q308			
BASE	1.81 V	01.56 V	6.07 V
EMITER	2.47 V	6.06 V	6.07 V
COLECTOR	0.005 V	0.005 V	0.005 V
Q309			
BASE	2.18 V	2.01 V	2.33 V
EMITER	2.87 V	2.7 V	3 V
COLECTOR	0.012 V	0.005 V	0.012 V
Q310			
BASE	0.02 V	3.89 V	0.017 V
EMITER	0.005 V	0.004 V	0.005 V
COLECTOR	2.92 V	0.008 V	2.91 V
Q501			
BASE	0.69 V	0.69 V	0.69 V
EMITER	0.002 V	0.003 V	0.003 V
COLECTOR	0.02 V	0.012 V	0.023 V
Q502			
BASE	0.31 V	0.38 V	0.33 V
EMITER	0.004 V	0.004 V	0.004 V
COLECTOR	2.65 V	1.93 V	2.4 V
Q504			
BASE	0.59 V	0.51 V	0.50 V
EMITER	0.03 V	0.03 V	0.03 V
COLECTOR	3.78 V	3.75 V	3.71 V
Q5S1			
BASE	0.006 V	0.005 V	0.003 V
EMITER	1.77 V	1.8 V	1.89 V
COLECTOR	2.41 V	2.1 V	2.4 V
Q515			
BASE	4.94 V	0.5~4.3 V	0.4~4.9 V
EMITER	0.002 V	0.003 V	0.005 V
COLECTOR	0.02 V	0.2~3.5 V	0.4~4.9 V
Q514			
BASE	4.96 V	0.8~4.2 V	0.2~4.3 V
EMITER	0.002 V	0.002 V	0.003 V

PIN	EE	PB	REC
COLECTOR	0.02 V	0.01~4.8V	0.011 V
Q7S1			
BASE	0.007 V	0.007 V	0.008 V
EMITER	0.001 V	0.001 V	0.001 V
COLECTOR	3.7 V	3.5 V	0.057 V
Q801			
BASE	0.7 V	(-)0.1 V	0.01 V
EMITER	0.001 V	0.003 V	0.001 V
COLECTOR	0.004 V	~	0.006 V
Q802			
BASE	0.7 V	(-)0.12 V	0.7 V
EMITER	0.001 V	0.001 V	0.001 V
COLECTOR	0.004 V	0.02 V	0.005 V
Q804			
BASE	1.81 V	2.5 V	1.79 V
EMITER	2.5 V	3.20V	2.48 V
COLECTOR	0.002 V	0 V	0 V
Q901			
BASE	0.005 V	0.005 V	0.006 V
EMITER	0.003 V	2.04 V	1.9 V
COLECTOR	0.003 V	0.004 V	0.005 V
Q902			
BASE	(-)1.64 V	(-)1.69 V	(-)1.79 V
EMITER	0.003 V	0.004 V	0.004 V
COLECTOR	0.004 V	0.004 V	0.005 V
Q903			
BASE	(-)1.74 V	(-)1.63 V	(-)1.8 V
EMITER	0.003 V	0.003 V	0.005 V
COLECTOR	0.003 V	0.004 V	0.005 V

PRINTED CIRCUIT DIAGRAMS

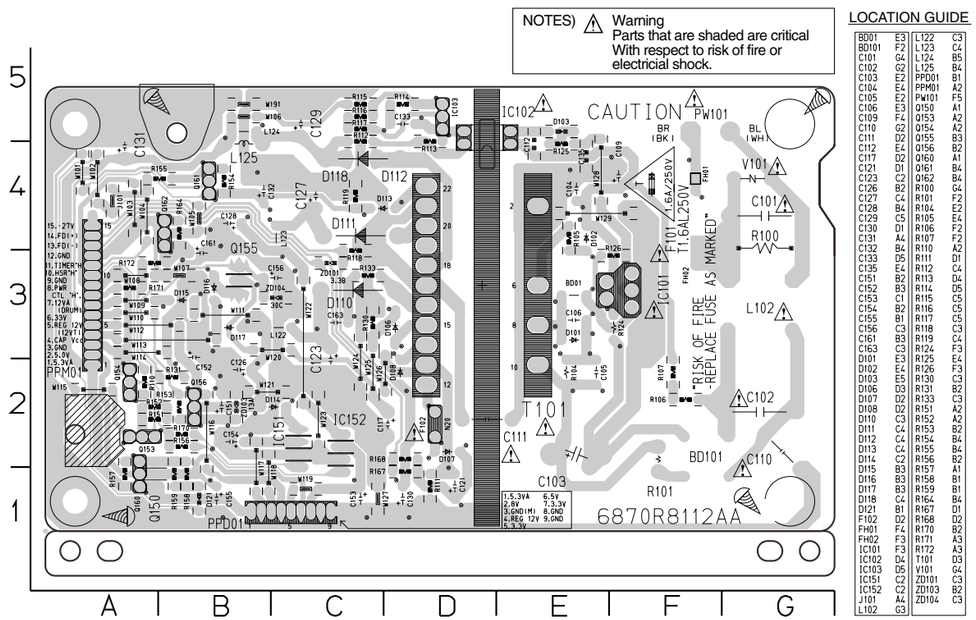
1. MAIN P.C.BOARD



LOCATION GUIDE

BC91	A6	C806	C9	L302	E5
BC92	A3	C807	E10	L303	F6
C203	G10	C808	C9	L304	G7
C204	H10	C809	D8	L305	H7
C207	H11	C812	D8	L306	H9
C210	H11	C814	D8	L307	E9
C211	H12	C815	D8	L501	J8
C212	H12	C816	E8	L503	H9
C213	G11	C817	E9	L504	L2
C215	H11	C818	E8	L505	L11
C301	E8	C820	E9	L506	K9
C302	F7	C822	E9	L5F1	M2
C304	F10	C825	D10	L5F2	M2
C307	E8	C828	C7	L5G1	N9
C311	F5	C829	C7	L5S1	J9
C313	F4	C834	C7	L701	C1
C314	E7	C859	D8	L702	D1
C315	G9	C861	C8	L704	E12
C316	G9	C863	D8	L705	E11
C318	G7	C864	E7	L706	E2
C320	H8	C869	C2	L7M1	C1
C322	H8	C886	B6	L7V1	L4
C323	F6	C887	C8	L801	D10
C324	F7	C888	C3	L803	C5
C325	H8	C931	B12	L901	B3
C327	G8	C932	B11	L902	B3
C331	G6	C933	B11	L903	B3
C333	G7	CS501	M11	L904	B4
C336	F7	D301	I6	L905	A2
C337	G7	D501	M6	L906	A2
C339	H6	D502	L10	L907	B3
C346	E9	D509	L10	L908	B9
C347	G7	D801	C2	L909	B8
C348	F9	D802	B2	L910	B4
C349	F7	D901	C5	LD501	I7
C353	G9	D902	C5	LED501	N11
C356	G9	ES501	H1	MS501	K3
C357	F10	ES502	I12	P3D01	E8
C359	F9	F8A1	G12	P3D02	F6
C362	H9	FL301	G5	P3D03	G12
C500	L3	IC501	L8	PM601	N6
C502	M8	IC503	L12	PM602	N9
C503	M8	IC504	M7	PM603	N4
C504	J9	IC505	J6	PMC01	G3
C505	J6	IC7V1	L5	PMD01	J12
C517	M7	J502	M8	PMD02	C12
C523	L9	J503	M8	PMJ01	L12
C524	L9	J504	K1	PMP01	C5
C526	F2	J701	F2	Q306	F4
C534	J1	J702	F2	Q503	M6
C546	G3	J801	C3	Q705	E2
C561	J10	J802	C3	RC501	N8
C5A5	J9	J804	D6	RS501	K5
C5G1	M10	JK5L1	N3	RS502	K9
C708	D1	JK902	B8	SC901	A4
C710	C2	JK903	A11	SW501	M7
C718	E11	JP01	K12	SW502	M6
C719	F11	JP02	K12	SW503	M5
C727	E12	JP03	H1	SW504	M5
C729	G12	JP04	H1	SW505	M4
C732	F12	JP05	D2	SW901	A11
C751	A2	JP06	D2	TU701	A1
C755	D3	JP07	D2	X301	F7
C7M2	C1	JP08	D3	X302	G7
C7S1	D1	JP09	G1	X501	M8
C7S2	E1	JP10	G1	X502	M7
C7V1	L4	L201	I11	X751	F12
C7V3	L4	L301	E10		

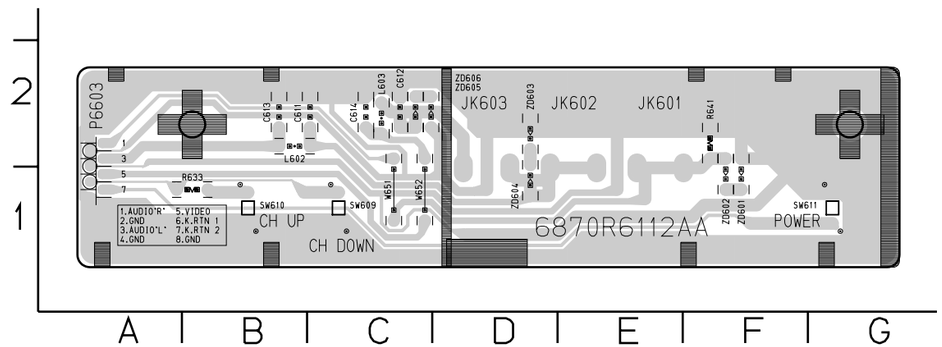
2. SMPS P.C.BOARD



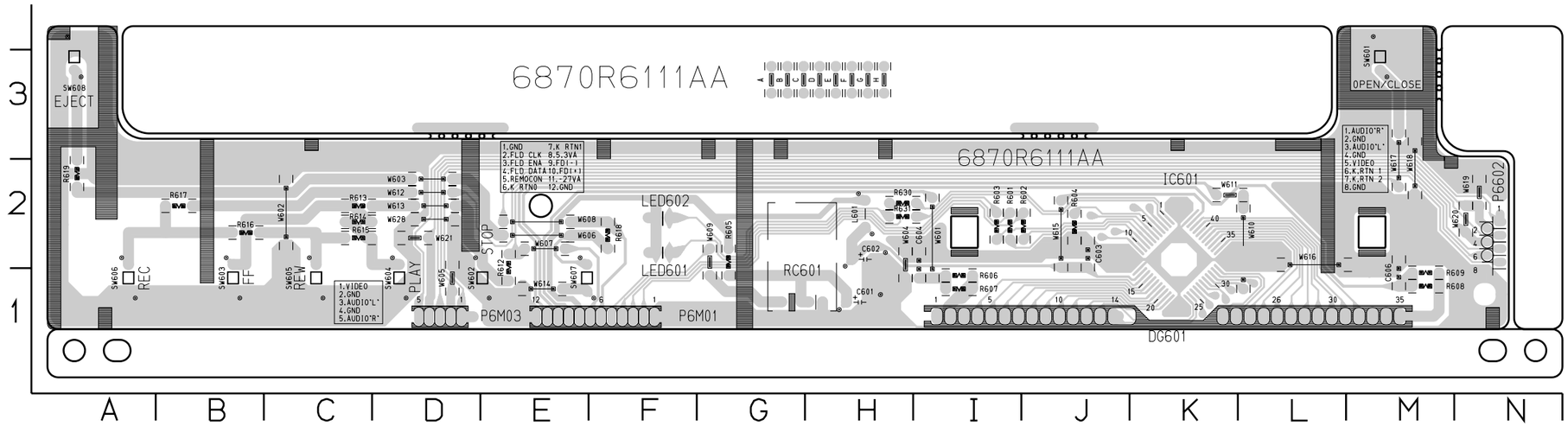
LOCATION GUIDE

BD01	E3	L122	C3
BD101	F2	L123	C4
C101	G4	L124	B5
C102	G2	L125	B4
C103	E2	PPD01	B1
C104	E2	PPM01	A2
C105	E2	PW101	F5
C106	E3	Q150	A1
C109	F4	Q153	A2
C110	G2	Q154	A2
C111	D2	Q155	B3
C112	E4	Q156	B2
C117	D2	Q160	A1
C121	D1	Q161	B4
C123	C2	Q162	B4
C126	B2	R100	G4
C127	C4	R101	F2
C128	B4	R104	E2
C129	C5	R105	E4
C130	D1	R106	F2
C131	A4	R107	F2
C132	B4	R110	A2
C133	D5	R111	D1
C135	E4	R112	C4
C151	B2	R113	D4
C152	B3	R114	D5
C153	C1	R115	C5
C154	B2	R116	C5
C155	B1	R117	C5
C156	C3	R118	C3
C161	B3	R119	C4
C163	C3	R124	F3
D101	E3	R125	E4
D102	E4	R126	F3
D103	E5	R130	C3
D106	D3	R131	B2
D107	D2	R133	C3
D108	D2	R151	A2
D110	C3	R152	A2
D111	C4	R153	B2
D112	C4	R154	B4
D113	C4	R155	B4
D114	C2	R156	B2
D115	B3	R157	A1
D116	B3	R158	B1
D117	B3	R159	B1
D118	C4	R164	B4
D121	B1	R167	D1
F102	D2	R168	D2
FH01	F4	R170	B2
FH02	F3	R171	A3
IC101	F3	R172	A3
IC102	D4	T101	D3
IC103	D5	V101	G4
IC151	C2	ZD101	C3
IC152	C2	ZD103	B2
J101	A4	ZD104	C3
L102	G3		

3. KEY P.C.BOARD



4. TIMER P.C.BOARD

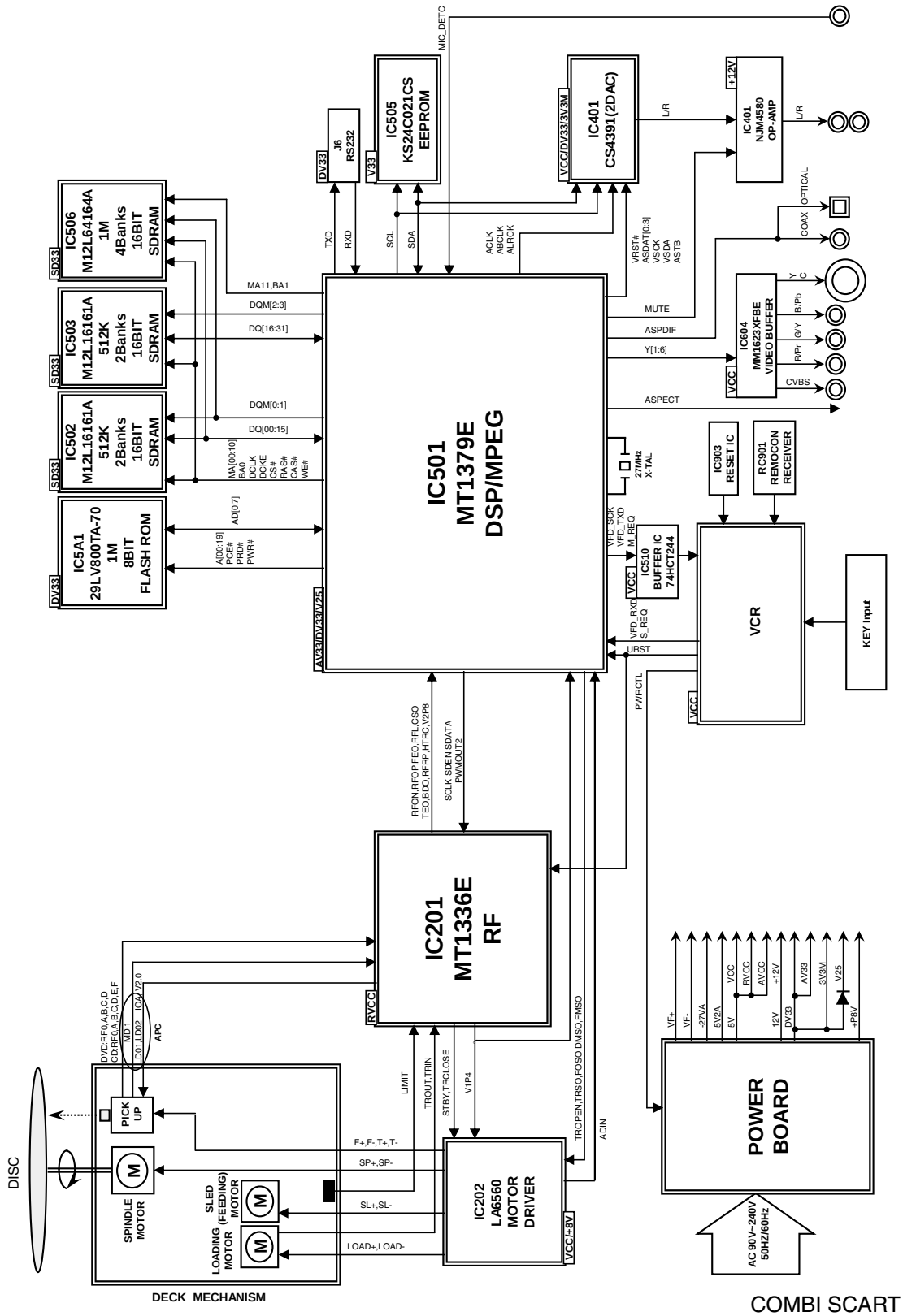


MEMO

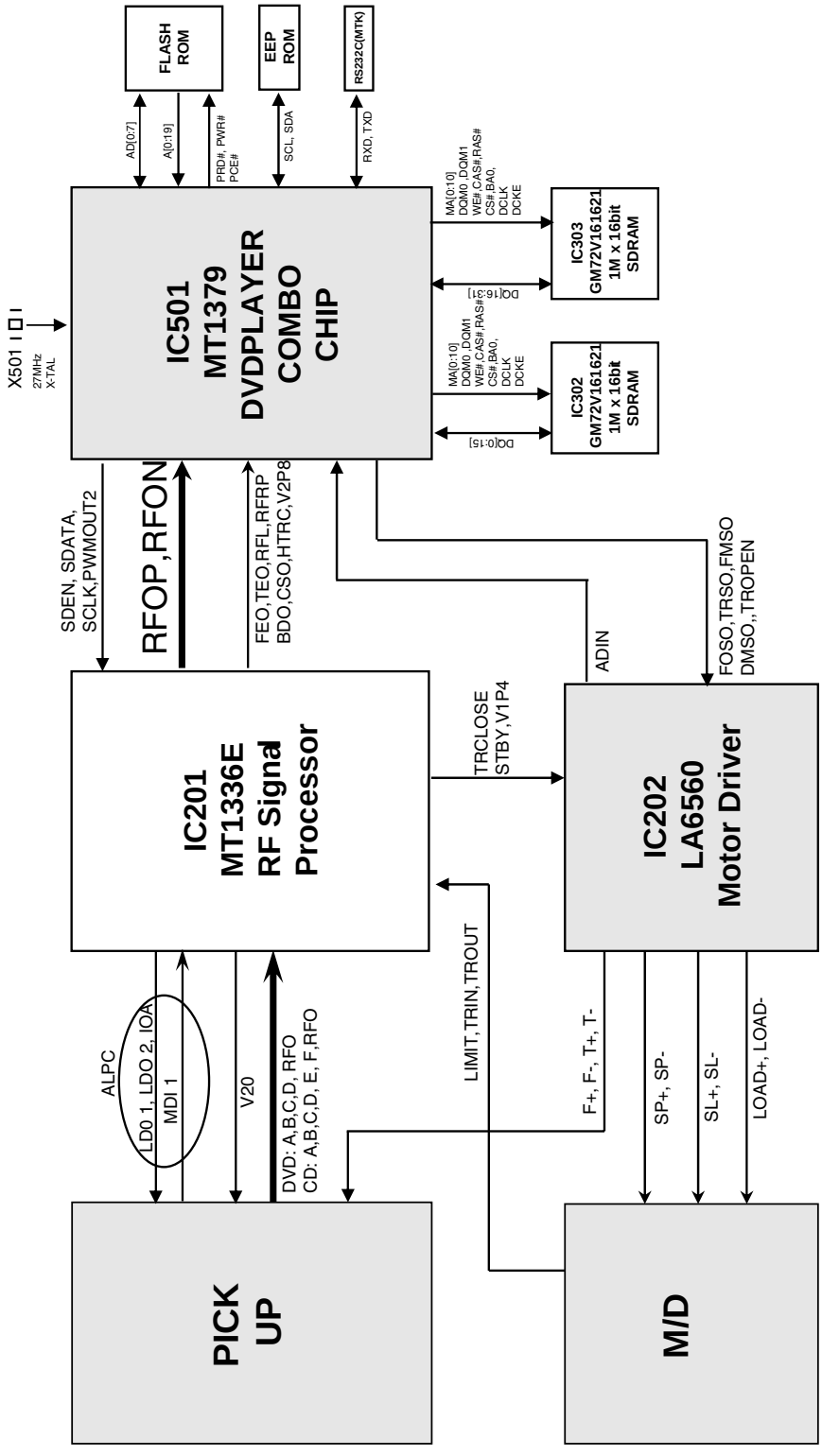
MEMO

BLOCK DIAGRAMS

1. Overall Block Diagram

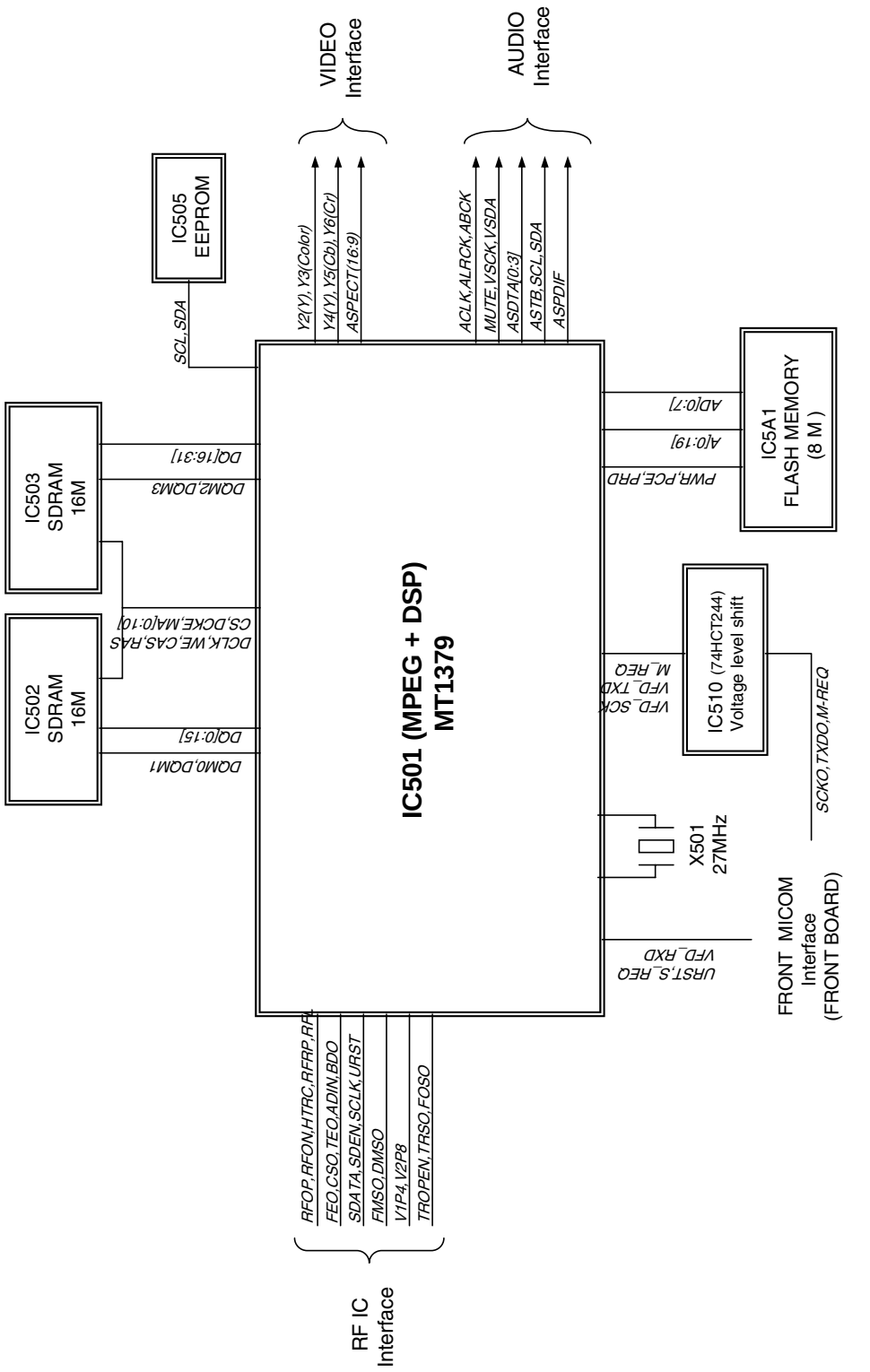


2. SERVO Block Diagram



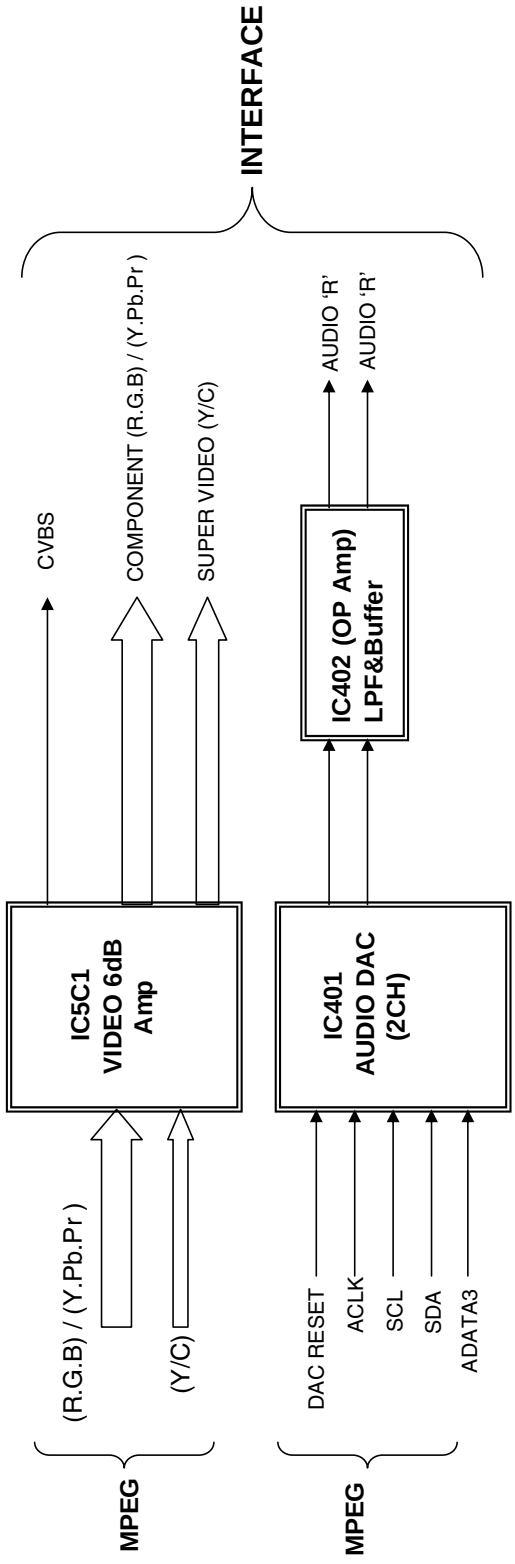
COMBI SCART
TOSHIBA

3. MPEG & MEMORY Block Diagram



COMBI SCART
TOSHIBA

4. VIDEO & AUDIO Block Diagram

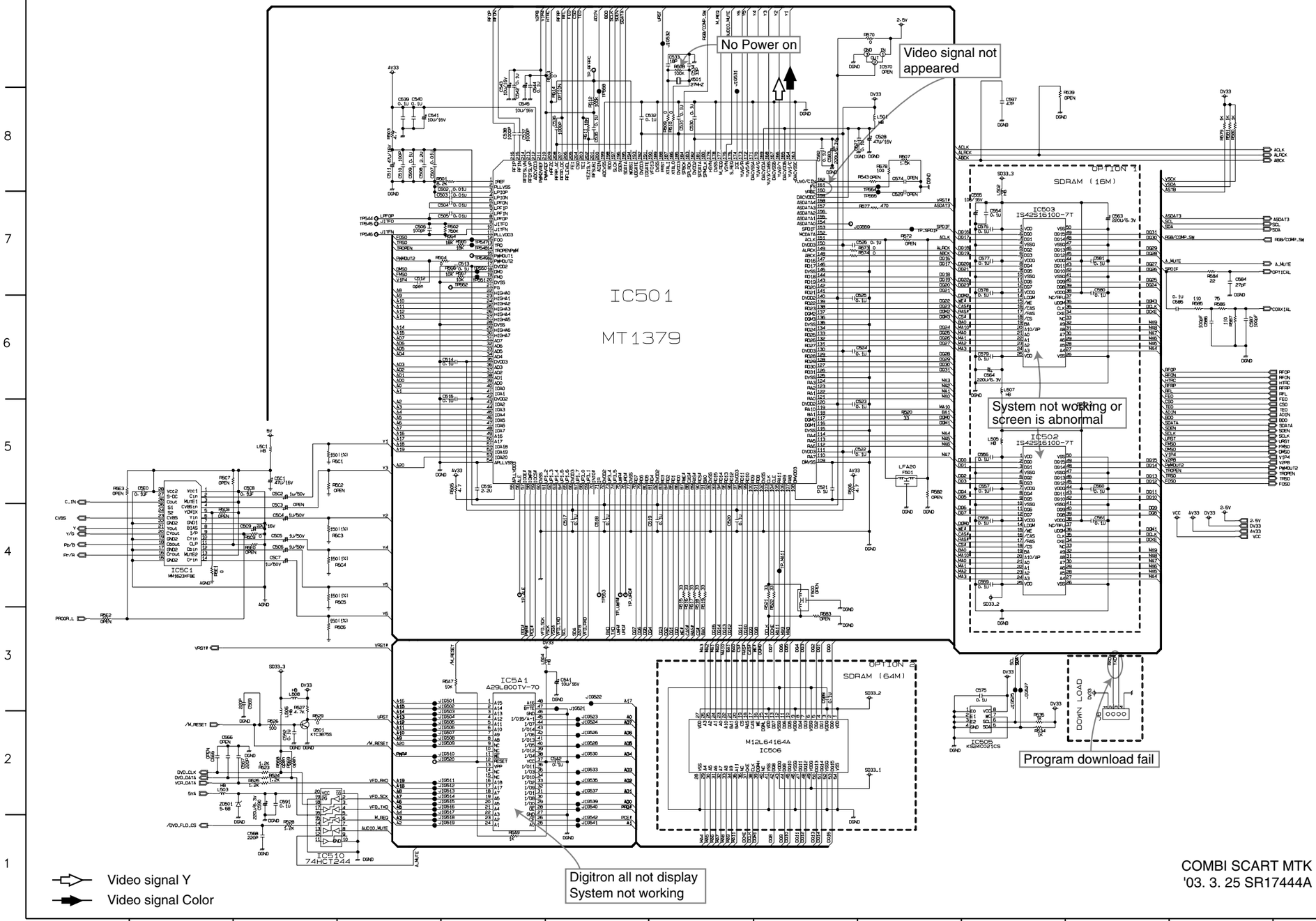


COMBI SCART
TOSHIBA

MEMO

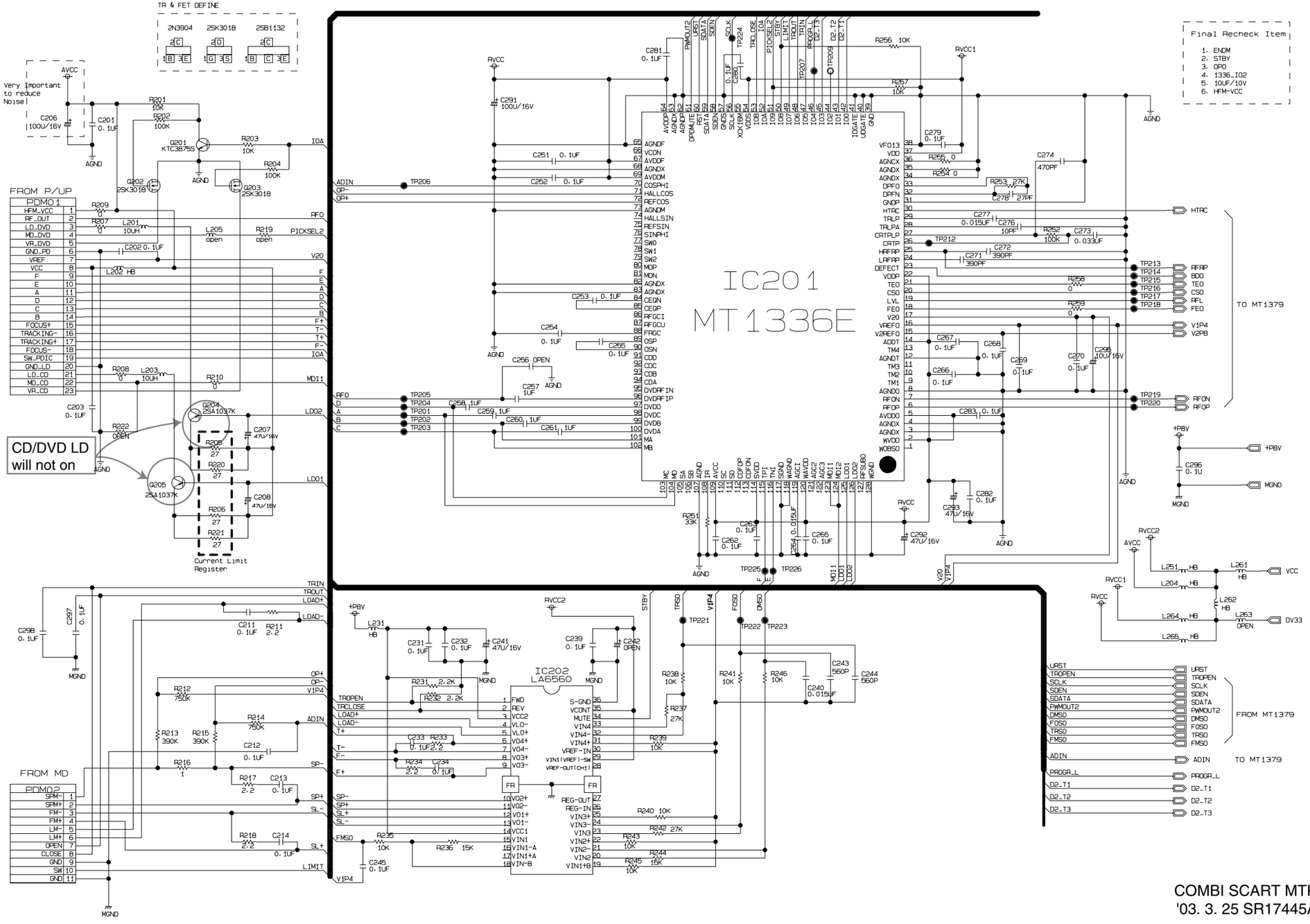
CIRCUIT DIAGRAMS

1. SYSTEM CIRCUIT DIAGRAM

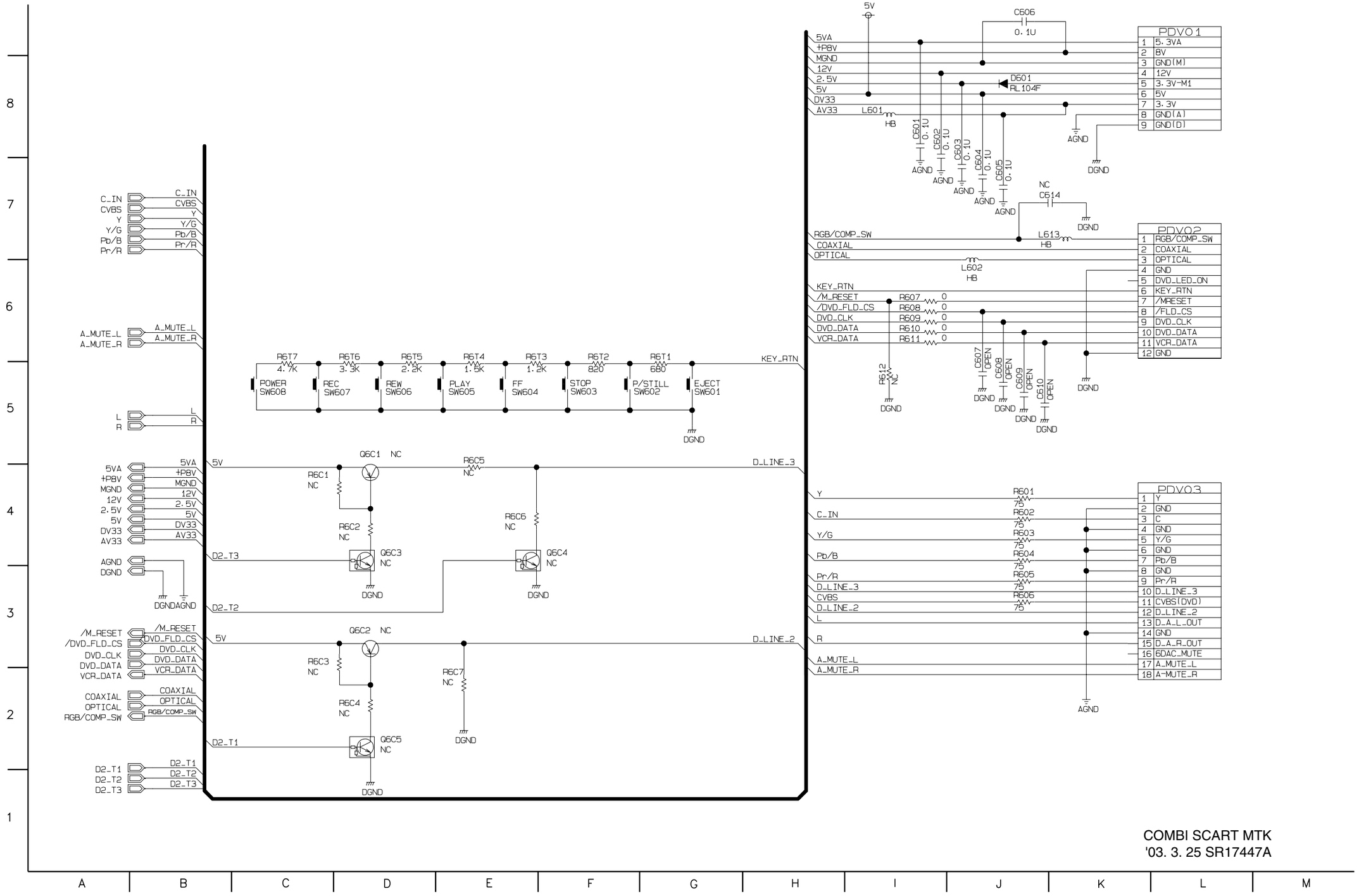


COMBI SCART MTK
'03. 3. 25 SR17444A

2. RF & DSP SERVO CIRCUIT DIAGRAM

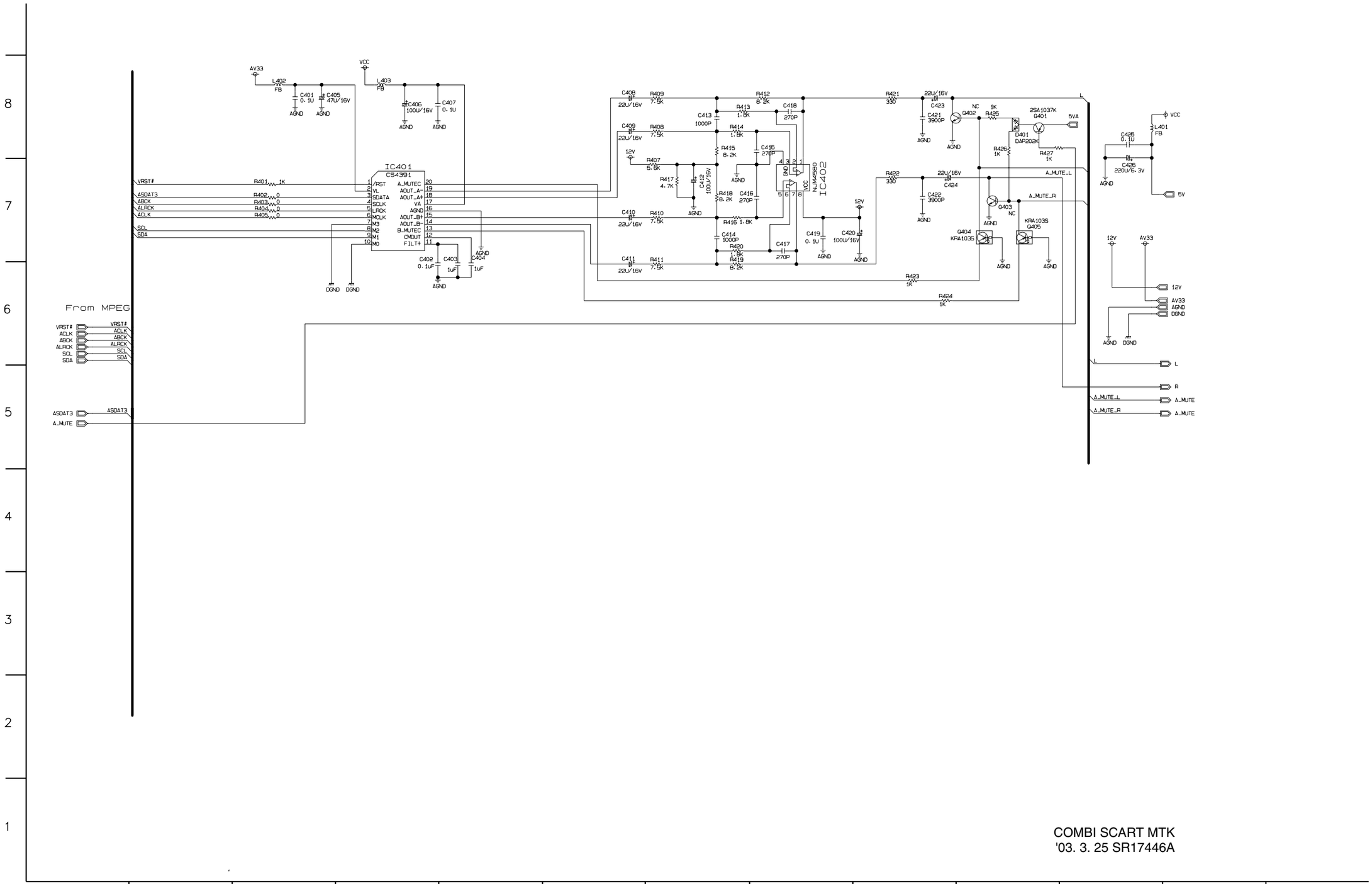


3. AUDIO CIRCUIT DIAGRAM



COMBI SCART MTK
'03. 3. 25 SR17447A

4. AV/JACK CIRCUIT DIAGRAM



COMBI SCART MTK
'03. 3. 25 SR17446A

• CIRCUIT VOLTAGE CHART

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	1.03	2.99	0	0	1.22	1.22	3.27	3.28	0	0	0	0								
2	5.11	5.08	0	0	0	0	1.18	1.26	0	0	2.59	2.55	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
3	0	0	8.04	8.01	0.96	0.9	1.1	1.52	0	0	0	0	0.08	0.16	3.28	3.29	5.52	5.49	5.09	5.08
4	0	0	0.12	0.06	2	2.06	0	0	0	0	2.59	2.56	1.82	0.45	3.28	3.28	5.52	5.48	2.43	2.42
5	5.11	5.07	0	0.06	0	1.51	0.66	1.07	3.28	3.29	0	0	2.84	0	0	1.65	5.51	5.47	5.09	5.08
6	0	1.95	3.64	3.69	1.48	1.47	0.85	1.12	3.28	3.29	3.24	3.23	2.83	3.12	1.63	1.64	0	0	1.45	0
7	0	0	3.62	3.61	0	1.56	3.27	3.28	0	0	0	0	0.69	0.26	1.64	1.65	5.51	5.48	0	0
8	0	0	3.64	3.53	3.2	1.52	0.51	0.97	3.28	3.29	0.14	0.08	1.72	0.25	1.59	1.61	5.51	5.48	1.45	1.69
9	5.11	0	3.6	3.76	0.12	0.06	3.06	0			0	0	1.92	0.9	0	0	5.52	5.47	0	0
10	5.11	5.08	3.62	2.43	0.12	0.06	0	0			0	0	1.7	1.45	3.28	0	12.03	12.03	2.47	2.46
11	5.11	5.08	3.63	4.85	3.25	3.25	0.06	0.98			0.15	0.09	0	0	3.28	3.29			0	0
12	0	0	3.62	3.72	1.41	1.49	3.18	0.87			0	0	0	0	0	0			1.14	1.76
13	5.11	0	3.64	3.57	1.41	1.41	3.27	3.28			0.15	0.08	3.27	3.29	5.01	5.01			0	0
14	5.11	5.08	8.04	8.01	0	0	2.94	2.56			5.19	5.19	3.56	3.55	2.31	2.31			2.42	2.42
15	2.84	2.81	1.45	1.48	1.42	1.42	0.47	0.42			0.14	0.09	3.29	3.29	4.96	0			5.09	5.08
16	1.45	1.43	0.27	1.39	3.3	0	2.93	3.01			5.25	5.24	0	0	1.42	2.41			2.43	2.42
17	2.08	2.07	0.29	1.32	2.53	2.53	3.21	3.22			0.15	0.08	0.23	0.06	2.4	2.39			0	0
18	1.37	1.42	1.45	1.43	1.42	2.27	2.87	2.95			5.23	5.23	0	0	0	0			2.49	2.47
19	0.69	2.3	1.45	1.43	1.42	1.39	0.15	1.32			0	0	0	0	5.11	5.09			0	0
20	2.4	0	1.45	0.82	0	0	0	0.05			5.25	5.25	0	0.87	2.41	2.41			2.48	2.47
21	2.35	0	1.45	1.43	2.61	2.58	3.09	1.32					1.98	2.64	2.43	2.43			0	0
22	5.11	5.08	1.45	1.43	0.75	1.46	3.09	1.32					2.28	2.18	0	0			1.18	2.3
23	0	0	1.47	1.37	2.83	1	3.09	1.32					2.13	1.96					1.76	2.17
24	2.59	3.2	1.45	1.43	1.9	0.89	3.09	1.33					1.67	2.01					0	0
25	0.19	1.88	1.45	1.43	1.72	0.39	3.27	3.29					1.99	1.72					1.76	2.24
26	1.58	0	0.95	0.91	0.68	0.31	0	0					1.93	2.19					0	0
27	2.56	3.13	0	0	2.84	3.16	0.15	1.36					2.05	1.94					0	0
28	2	2.01	1.45	1.43	0	0	1.84	2.36					0	0					0	0
29	2	2.06	5.15	5.11	2.85	0.66	1	2.32					0	0					0.06	0.05
30	2.96	1.52	1.45	1.43	1.83	0.49	0.54	1.75					0	0					5.09	0
31	0	0	1.45	1.43	0.91	1.39	0.06	0.06					1.49	2.03						
32	0.06	2.07	1.45	1.43	1.43	1.2	0.05	0.06					0.16	1.07						
33	0.07	2.07	1.46	1.45	1.51	1.57	0	0					1.96	1.25						
34	0	0	5.08	5.06	1.51	1.43	0.73	1.26					0.16	1.1						
35	0	0	5.15	5.11	3.3	3.29	1.48	1.55					0.99	2.2						
36	0	0	0	0	0.81	1.26	2.91	2.53					1.17	1.07						
37	5.13	0			1.45	1.02	0.07	0					0.79	1.82						
38	0	0			1.82	1.6	3.27	3.28					0.15	1.07						
39	0	0			1.2	1.5	1.06	1.05					3.29	3.3						
40	0	0			2	2.06	0.47	0.98					1.93	3.09						
41	0	0			2.17	1.95	0	0					0.16	1.07						
42	5.12	5.09			2.53	2.52	0	0.6					1.5	2.2						
43	5.12	5.09			1.96	1.9	1.12	1.24					0.16	1.07						
44	5.12	5.09			1.79	1.9	3.27	3.28					1.21	2.64						
45	5.12	5.09			0.8	1.72	1.21	0.99					0.16	1.08						
46	5.12	5.09			0.8	1.96	1.31	1.34					1.64	1.48						
47	0	0			0.8	1.84	0	0					2.05	2.06						
48	5.12	5.09			3.3	2.63	1.43	1.44					0	0						
49	5.12	0			0	0.13	0.88	1.01					0	0						
50	5.08	5.06			0	0.07	0	0					0.07	0.13						
51	5.09	5.07			0	0														
52	5.1	0			0	0														
53	0	0			0	0														
54	5.13	0			0	0														
55	0.09	0.2			3.25	3.27														
56	1.61	0			1.21	1.18														
57	0	0			0	0														
58	0	0			3.29	3.29														
59	0	0			0	0														
60	0	0			0	0														
61	3.28	0			2.59	2.57														
62	0	0			2.58	2.58														
63	0	0			0	0														
64	0	0			2.59	2.56														
65	0	0			3.29	3.29														
66	0.26	0			3.3	3.29														
67	5.12	5.08			3.29	3.29														
68	0	0			2.57	2.56														
69	5.12	0			5.19	5.18														
70	3.21	2.03			2.59	2.57														
71	3.46	2.2			0.12	0.08														
72	2.81	0			2.53	2.52														
73	0	0			2.59	2.57														
74	0.21	0.09			3.29	3.29														
75	0.22	0			2.61	2.61														
76	0	0.1			3.27	3.24														
77	0.21	0.09			0	0														
78	0.23	0.09			0.94	1.04														
79	0.21	0.08			0.78	1.06														
80	0.23	0.08			0.89	1.15														

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
81	0.22	0			0.99	1.34														
82	0	0			2.52	2.52														
83	0	0			3.09	1.33														
84	0.07	0			0.37	1.16														
85	0.07	2.27			3.08	1.1														
86	1.97	0			3.07	1.08														
87	1.96	1.9			0.59	1.04														
88	1.54	1.71			1.57	2.53														
89	0.19	2.22			3.2	3.13														
90	0.21	0			2.77	2.53														
91	0.22	0.06			0.22	1.68														
92	0.22	0			0	0														
93	0.23	0.06			3.32	1														
94	0.23	0.06			0.16	1.58														
95	2.28	0			3.31	1.62														
96	2.28	2.25			3.3	1.08														
97	2.27	1.23			3.3	3.29														
98	2.27	2.23			3.32	1.62														
99	2.27	2.23			0.16	1.09														
100	2.26	2.23			3.32	1.27														
101	2.08	2.17			3.3	1.32														
102	2.07	2.17			0	0														
103	2.07	2.18			1.56	1.55														
104	2.08	0			0.94	1.25														
105	0.14	0.15			0.41	0														
106	0.14	0.16			0.05	0.06														
107	0	0			0	0.06														
108	1.28	1.28			3.27	3.26														
109	5.18	5.05			0	0														
110	0.14	0.16			0.19	1.74														
111	0.15	0.15			3.3	3.29														
112	0.13	0.16			0.18	1.62														
113	0.14	0.15			2.98	2.38														
114	5.1	5.05			3.02	1.48														
115	2.07	2.09			0	0														
116	2.06	2.09			2.86	3.01														
117	0	0			2.86	2.54														
118	0	0			0	0														
119	0	0			0	2.5														
120	5.1	5.05			2.55	2.51														
121	0.13	0.15			3.03	1.4														
122	0.14	0.15			3.03	1.4														
123	0	0.18			0.22	1.39														
124	0	0.18			0.22	0.34														
125	5.08	5.03			0	0														
126	5.08	3.16			3.31	0.98														
127	0.06	2.08			0.26	1.64														
128	0	0			3.31	1.53														
129					3.3	1.15														
130					3.3	3.29														
131					3.31	1.49														
132					0.16	0.89														
133					3.3	0														
134					3.3	1.07														
135					0	0														
136					2.86	2.53														
137					2.86	2.53														
138					0.07	0.86														
139					0.09	0.99														
140					0.07	2.51														
141					0.07	0.94														
142					0.09	1.13														
143					0.07	1.19														
144					0.09	1.07														
145					0.09	0														
146					0	1.51														
147					0.09	1.25														
148					0.07	1.64														
149					0.06	0														
150					0	1.65														
151					0.07	3.29														
152					0	1.6														
153					0	1.64														
154					0	1.44														
155					0	0														
156					0	0														
157					0	1.63														
158					0	3.29														
159					0	3.27														
160					0	1.27														

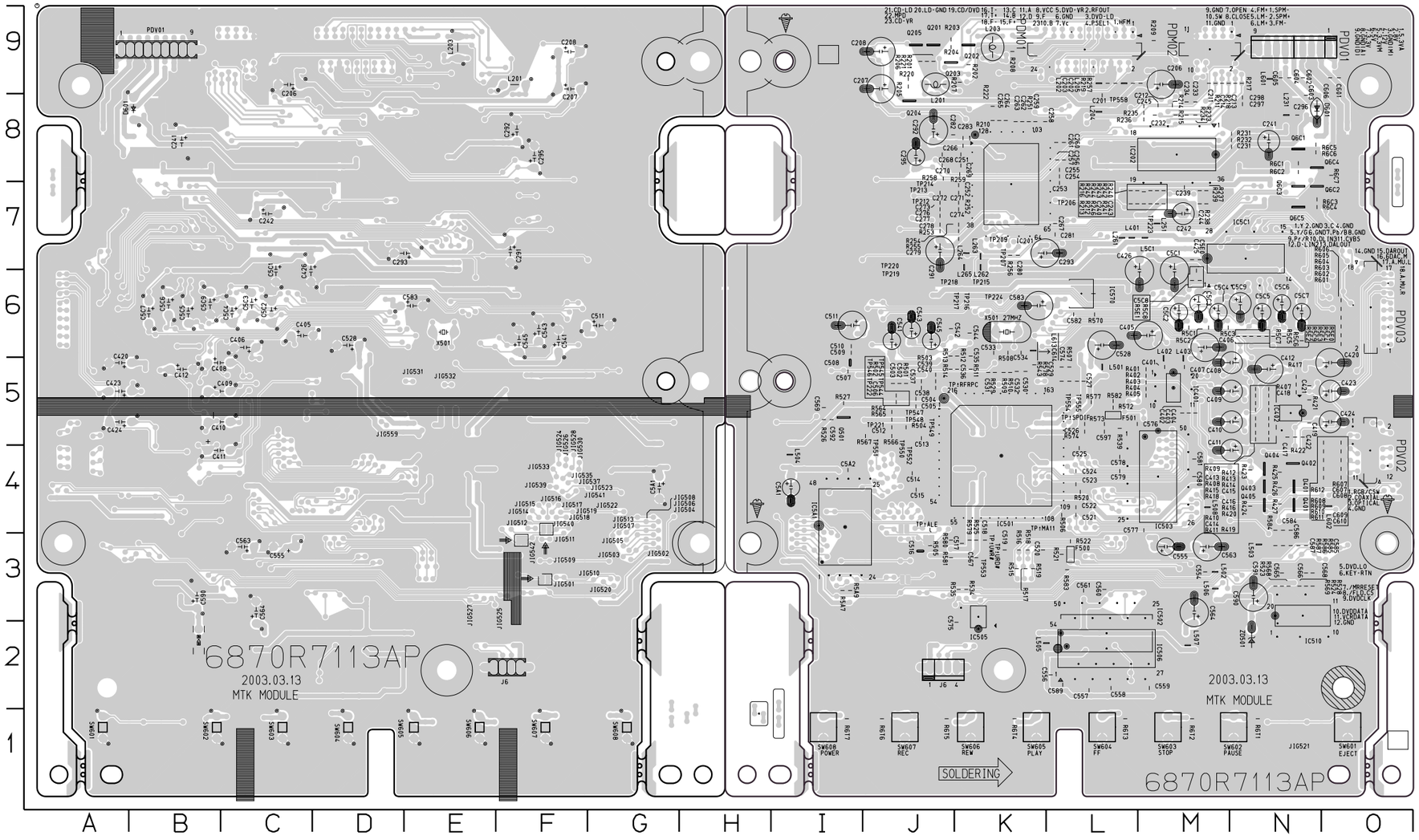
	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
161					0	1.27														
162					0	2.35														
163					0	0														
164					0	0.73														
165					0	3.27														
166					0	0.5														
167					0	0														
168					0	0.53														
169					0	3.27														
170					0	0.59														
171					0	0														
172					3.01	0.72														
173					0	0.72														
174					0	0														
175					0	2.73														
176					0	3.13														
177					0	3.13														
178					0	3.25														
179					0	0														
180					0	0														
181					2.04	2.64														
182					0	2.52														
183					0	0														
184					0	0.09														
185					0	3.26														
186					-	-														
187					0	0.08														
188					0	0														
189					0	0														
190					0	0														
191					0.23	0														
192					0	3.29														
193					0	0														
194					0	0														
195					0	0														
196					0	0														
197					0	1.63														
198					0	0														
199					0	0														
200					0	2.15														
201					0	1.44														
202					0	1.44														
203					0	1.43														
204					0	1.43														
205					0	1.42														
206					0	2.1														
207					0	2.07														
208					0	1.41														
209					0	1.52														
210					0	1.43														
211					0	2.81														
212					0	3.28														
213					0	0.12														
214					0	0.12														
215					1.02	1.43														
216					0	1.43														

	Q201		Q202		Q203		Q204	
	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
E	0	0	0	0	0	0	5.14	4.34
C	0	5.09	0	0	0	0.19	0	2.42
B	0.68	0	0	5.04	5.04	0	5.08	3.64

	Q205		Q501		Q6401			
	STOP	PLAY	STOP	PLAY	STOP	PLAY		
E	5.14	5.10	0	5.17	0			
C	0.5	0	0	0	0	0.13		
B	5.08	5.05	0.83	0.83	5.11	0		

PRINTED CIRCUIT DIAGRAMS

1. MAIN P.C.BOARD



LOCATION GUIDE

J1G501	F3	C201	L8	C298	N8	C534	K6	C602	N9	PDV02	04	R254	K7	R528	N3	R6C6	N8
J1G502	G3	C202	L9	C401	M5	C535	K6	C603	N8	PDV03	06	R255	K7	R529	K5	R6C7	O8
J1G503	G3	C203	L9	C402	M5	C536	K5	C604	N9	Q201	J9	R256	K7	R534	K3	R6T1	N1
J1G504	G3	C206	M9	C403	M5	C537	J5	C605	N9	Q202	K9	R257	M9	R535	K3	R6T2	M1
J1G505	G3	C207	J9	C404	M5	C538	J5	C606	O9	Q203	J9	R258	J8	R539	L5	R6T3	L1
J1G506	G4	C208	J9	C405	M6	C539	J5	C607	O4	Q204	J8	R259	K8	R543	L5	R6T4	K1
J1G507	G4	C211	M9	C406	M6	C540	J5	C608	O4	Q205	J9	R401	M5	R564	J5	R6T5	J1
J1G508	G4	C212	M8	C407	M5	C541	J6	C609	O4	Q401	N4	R402	M5	R565	J5	R6T6	J1
J1G509	F3	C213	N9	C408	N5	C542	J6	C610	O4	Q402	N4	R403	M5	R566	J5	R6T7	I1
J1G510	G3	C214	M9	C409	N5	C543	J6	C614	K5	Q403	N4	R404	M5	R567	J5	SW601	O1
J1G511	F3	C231	N8	C410	N5	C544	K6	DA01	N4	Q404	N4	R405	M5	R568	N3	SW602	N1
J1G512	F4	C232	M8	C411	N5	C545	K6	DG01	N8	Q405	N4	R407	N5	R569	N3	SW603	M1
J1G513	G4	C233	M8	C412	N5	C554	M3	F500	L3	Q501	I5	R408	N5	R570	L6	SW604	L1
J1G514	F4	C234	M8	C413	N5	C555	M3	F501	L5	Q6C1	N8	R409	N5	R572	L5	SW605	K1
J1G515	F4	C239	M7	C414	N5	C556	L2	IC201	K7	Q6C2	N7	R410	N5	R573	L5	SW606	K1
J1G516	F4	C240	M7	C415	N5	C557	L2	IC202	M8	Q6C3	N7	R411	N5	R574	L5	SW607	J1
J1G517	F4	C241	N8	C416	N5	C558	L2	IC401	M5	Q6C4	N8	R412	N5	R577	L5	SW608	I1
J1G518	F4	C242	M7	C417	N5	C559	M2	IC402	N5	Q6C5	N7	R413	N5	R578	L5	TP206	L7
J1G519	F4	C243	M7	C418	N5	C560	L3	IC501	K4	R201	J9	R414	N5	R579	K3	TP207	K7
J1G520	G3	C244	M7	C419	N5	C561	L3	IC502	L2	R202	K9	R415	N5	R580	J3	TP209	K7
J1G522	G4	C245	M8	C420	O5	C563	M3	IC503	M4	R203	J9	R416	N5	R581	J3	TP212	J7
J1G523	G4	C251	K8	C421	N5	C564	M3	IC505	K3	R204	J9	R417	N5	R582	L5	TP213	J7
J1G524	F4	C252	K7	C422	N5	C565	N3	IC506	L2	R205	J9	R418	N5	R583	L3	TP214	J7
J1G525	E3	C253	L7	C423	O5	C566	N3	IC510	N3	R206	J9	R419	N5	R584	N4	TP215	K6
J1G526	F4	C254	L8	C424	O5	C567	K3	IC570	L6	R207	K9	R420	N5	R585	N3	TP216	K6
J1G527	E3	C255	L8	C425	M7	C568	N3	IC5A1	I4	R208	K9	R421	N5	R586	N3	TP217	K6
J1G528	F4	C256	L8	C426	M6	C569	I5	IC5C1	N7	R209	M9	R422	N5	R587	N3	TP218	K6
J1G530	F4	C257	L8	C502	J5	C574	L5	J6	J2	R210	K8	R423	N4	R5A7	I3	TP219	J6
J1G531	E5	C258	K8	C503	J5	C575	K2	J1G521	N8	R211	M9	R424	N4	R5A9	I3	TP220	J7
J1G532	E6	C259	K8	C504	J5	C576	L5	L201	J9	R212	L7	R425	N4	R5C1	M6	TP221	J5
J1G533	F4	C260	L8	C505	J5	C577	M4	L202	L9	R213	L7	R426	N4	R5C2	M6	TP222	J5
J1G535	F4	C261	L8	C506	J5	C578	L4	L203	K9	R214	M8	R427	N4	R5C3	M6	TP223	M7
J1G537	F4	C262	K8	C507	J5	C579	L4	L204	L8	R215	M8	R501	J5	R5C4	N6	TP224	K6
J1G539	F4	C263	K8	C508	I5	C580	M4	L205	L9	R216	L7	R502	J5	R5C5	N6	TP544	J5
J1G540	F4	C264	K8	C509	I6	C581	M4	L231	N8	R217	N9	R503	J5	R5C6	N6	TP545	J5
J1G541	F4	C265	K8	C510	I6	C582	L6	L251	M7	R218	M9	R504	J5	R5C7	N6	TP546	J5
J1G542	F3	C266	K8	C511	I6	C583	K6	L261	L7	R219	L9	R505	J3	R5C8	M6	TP547	J5
J1G559	D5	C267	L7	C512	J5	C584	N4	L262	K7	R220	J9	R506	L4	R5C9	N6	TP548	J5
TP201	D9	C268	J8	C513	J5	C585	N3	L263	K7	R221	J9	R507	L5	R5E0	N6	TP549	J5
TP202	D9	C269	K8	C514	J4	C586	N4	L264	K7	R222	K8	R508	K6	R5E1	M6	TP550	J5
TP203	D9	C270	J8	C515	J4	C587	N3	L265	K7	R231	N8	R509	K5	R5E2	N6	TP551	J5
TP204	D9	C271	K7	C516	J3	C589	L2	L401	L7	R232	N8	R510	K5	R5E3	N6	TP552	J5
TP205	D9	C272	J7	C517	K3	C590	N3	L402	M5	R233	M8	R511	K5	R601	O6	TP553	K3
TP225	D9	C273	J7	C518	K3	C591	N3	L403	M5	R234	M8	R512	K6	R602	O6	TP554	L5
TP226	D9	C274	K7	C519	K3	C592	I5	L501	L5	R235	M8	R513	J6	R603	O6	TP555	L5
		C276	J7	C520	K3	C597	L5	L502	M3	R236	M8	R514	J5	R604	O6	TP558	L8
		C277	J7	C521	L4	C5A1	I4	L503	N3	R237	M7	R515	K3	R605	O6	TP:ALE	J3
		C278	J7	C522	L4	C5A2	I4	L504	I4	R238	M7	R516	K3	R606	O6	TP:MA11	L4
		C279	K7	C523	L4	C5C1	M6	L505	K2	R239	M7	R517	K3	R607	O5	TP:WRPO	K5
		C280	K7	C524	L4	C5C2	M6	L506	M3	R240	M7	R518	K3	R608	O4	TP:SPDIF	L5
		C281	L7	C525	L4	C5C3	M6	L507	M2	R241	M7	R519	K3	R609	O4	TP:URD#	K3
		C282	J8	C526	L5	C5C4	M6	L508	M4	R242	M7	R520	L4	R610	O4	TP:UWR#	K3
		C283	K8	C527	L5	C5C5	N6	L5C1	M7	R243	M7	R521	L3	R611	O5	X501	K6
		C291	J7	C528	L6	C5C6	N6	L601	N9	R244	M7	R522	L3	R612	O5	ZD501	N2
		C292	J8	C529	L5	C5C7	N6	L602	O4	R245	L7	R523	N3	R6C1	N8		
		C293	K7	C530	K5	C5C8	M6	L613	K6	R246	M7	R524	N3	R6C2	N8		
		C295	J8	C531	K5	C5C9	N6	PDM01	L9	R251	K8	R525	K3	R6C3	N7		
		C296	N8	C532	K5	C5E0	M7	PDM02	M9	R252	K7	R526	I5	R6C4	N7		
		C297	N8	C533	K6	C601	O9	PDV01	O9	R253	J7	R527	I5	R6C5	N8		

MEMO

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